EXPLORING CULTURAL BELIEFS AND PRACTICES FOR THE USE OF HERBAL MEDICINE AND REMEDIES DURING PREGNANCY IN LESOTHO

by

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SUPERVISOR: DR H C DE SWARDT

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DEDICATION

I dedicate this study to my lovely husband, Mr. Lekhotsa,
and my two sons, Thato and Katleho.

I love and appreciate you more than you will ever know.

Student number: 51134713

DECLARATION

I declare that **EXPLORING CULTURAL BELIEFS AND PRACTICES FOR THE USE OF HERBAL MEDICINE AND REMEDIES DURING PREGNANCY IN LESOTHO** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references. I further declare that I submitted the dissertation to originality checking software and that it falls within the accepted requirements for originality.

Thakanyane Juliah Lekhotsa — 1 January 2020

SIGNATURE — **DATE**

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ABSTRACT

This qualitative, exploratory, descriptive study explored culturally sensitive health information about the use of herbal medicine by pregnant women in Lesotho, in order to provide culturally sensitive health advice to pregnant women. Pregnant women used herbal medicine and remedies during pregnancy resulted in still births and complications during labour. Data on the beliefs and practices of fifteen purposively and conveniently sampled pregnant women attending a rural antenatal clinic was collected through semi-structured interviews and analysed using Colaizzi's seven-step method. Ethical principles and strategies to ensure trustworthiness were applied. One central theme emerged: *'Women believe that the use of herbal medicine and remedies is a traditional practice that pregnant women need to follow due to culture*'. The cultural beliefs and practices of the women were deeply rooted in Basotho culture, which guided the use of herbal medicine. However, some considered herbal medicines to be harmful, as the dosage and content of these medicines vary. Nurses are therefore key to providing culturally sensitive health care advise on using herbal medicine during pregnancy.

KEY CONCEPTS

Herbal medicine, cultural beliefs and practices, pregnant women, health education

QOBA

Boithuto bona ba boleng bo botle, bo hlalosang le ho fumaneng tlhaiso-leseling e mabapi le bophelo bo botle mabapi le ts'ebeliso ea meriana ea litlama ke basali ba baimana Lesotho, ele ho fana ka likeletso tsa bophelo bo botle ba setso. Lintlha tse mabapi le litumelo le litloaelo tsa basali ba baimana ba leshome le metso e mehlano ka boomo le ka mokhoa o fumanehang li ile tsa bokelloa ka lipuisano tse hlophisitsoeng le ho hlahlojoa ho sebelisoa mekhoa e supileng ea Colaizzi. Melao-motheo ea boits'oaro le maano a ho netefatsa hore a ts'epahetse a sebelisitsoe. Ho ile hoa hlaha sehlooho se le seng se bohareng: 'Basali ba lumela hore ts'ebeliso ea litlama ke tloaelo eo basali ba baimana ba lokelang ho e latela ka lebaka la moetlo'. Litumelo le litloaelo tsa basali li ne li metse ka metso moetlong oa Basotho, o neng o tataisa ts'ebeliso ea meriana ea litlama. Leha ho le joalo, ba bang ba ne ba nka meriana ea litlama e le kotsi, hobane litekanyetso le litlhare tsa meriana ena li ea fapana. Ka hona baoki ke senotlolo sa ho fana ka thuto ea bophelo bo botle ba setso mabapi le ho sebelisa litlama nakong ea boimana.

Mehopolo ea bohlokoa

Meriana ea litlama, litumelo le litloaelo tsa moetlo, basali ba baimana, thuto ea bophelo bo botle

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LIST OF ABBREVIATIONS

GOL	Government of Lesotho
SA	South Africa
VDRL	Venereal Disease Research Laboratory
WHO	World Health Organization

CHAPTER 1

ORIENTATION TO THE STUDY

1.1 INTRODUCTION

Delivery of effective antenatal care is crucial in preventing maternal and child morbidity and mortality (Myer & Harrison 2013:268; Oyerinde 2013:2). Early diagnosis of risk conditions, such as anaemia, hypertension and diabetes, allow for proper treatment and monitoring. Low birth weight babies, intrauterine foetal deaths, placenta abruptio, intrauterine infections and pre-term birth are conditions that could be missed if pregnant women make infrequent use of antenatal care services, or do not use them at all (Raatikanen, Heiskanen & Heinonen 2007:1). Mugomeri, Chatanga, Seliane and Maibvise (2015:1) report that 47.2% of pregnant women in Maseru, Lesotho use herbal medicine during pregnancy.The use of herbal medicine during pregnancy may lead to maternal and foetal death, complications during labour and decreased foetal survival and congenital malformations (Nyeko, Tumwesigye & Halage 2016).

The World Health Organization (WHO) (2016) suggests four focused visits in the prevention of such possible complications. The first visit should take place when a woman discovers that she is pregnant, the second at 28 weeks of gestation, the third at 32 weeks, and the last visit at 36 weeks. Pregnant women are encouraged to adhere to these visits because important investigations, such as screening for haemoglobin levels, syphilis (through a venereal disease research laboratory (VDRL) test) and blood grouping, are carried out at each visit prior to labour. Other examinations are performed in conjunction with these screening tests, such as abdominal examinations to identify the lie, position, presentation, and engagement of the foetus, auscultation of the foetal heart, assessment of the nutritional status of the woman, and a pelvic assessment (South Africa 2015:33). During these visits possible complications can be identified and the appropriate method of delivery discussed. Underlying deficiencies and illnesses that can be treated timeously and appropriately could be detected during these investigations. Antenatal care involves the provision of services by qualified trained health care providers, such as midwives and obstetricians, to ensure a positive outcome for both mothers and babies (Tiran 2012:12). Lesotho is no exception to these recommendations.

In sub-Saharan Africa, the maternal mortality rate is very high. According to Chinkhumba, De Allegri, Muula and Robberstad (2014:2), it is the region with highest maternal mortality ratio (500 deaths per 100,000 live births) and perinatal mortality rate (56 deaths per 100,000 live births). South Africa in 2010 had an estimated maternal mortality rate of 300 deaths per 100,000 live births by the (WHO 2013). Lesotho has the highest maternal mortality ratio in southern Africa (GOL 2013:17). According to the Government of Lesotho (GOL) (2013:17), the maternal mortality ratio increased from 762 deaths per 100,000 live births in 2004 to 1155 deaths per 100,000 live births in 2009.

The overall goal is to have a healthy mother and baby at the end of pregnancy and childbirth. The purpose of antenatal care is to prevent or identify and treat any condition that may threaten the health of the baby or the mother. During clinic visits, the professional nurse and qualified midwife provide antenatal care services that may include performing examinations such as taking vital signs, determining maternal weight, monitoring foetal growth and general foetal well-being, and providing health education about nutrition, following a healthy lifestyle, and preparing for labour and child care.

1.2 BACKGROUND TO THE RESEARCH PROBLEM

The use of herbal medicine remains popular in all regions of the developing world and its use is spreading rapidly in industrialised countries (De Wet & Ngubane 2014:129). Herbal medicines are indigenous plant-based substances that undergo minimal or no industrial processing and are used to treat illness in accordance with local or regional healing practices (WHO 2014). Surveys on the use of herbal medicines in pregnancy have reported a wide range of herbal medicine use (WHO 2014). Mogawane, Mothiba and Malema (2015:4) state that herbal medication is commonly used in Africa to prevent pregnant women from miscarrying. Mekuria, Erku, Gedresillase, Birru and Ahmedin (2017:3–7) find that the use of herbal medicine in Ethiopia is influenced by social and cultural norms, the perceived efficacy of the medicine, beliefs about its safety, and its accessibility. These authors further state that herbal medicine is used during pregnancy for many reasons — for minor pregnancy illnesses such as nausea and vomiting; for the augmentation of labour; for other illnesses that are not pregnancy related, such as colds, skin problems and respiratory illnesses; and for nutritional benefits (Mekuria et al 2017:2).

Mothupi (2014:3) finds that in Kenya herbal medicine is mainly used by people living in densely populated rural areas where access to public health care is limited. Its use has been influenced by social and cultural beliefs, by its perceived efficacy and by safety concerns. Forster, Denning, Wills, Bolger and McCarthy (2006:2) report similar evidence from Australia, where pregnant women use herbal medicine to alleviate candida infections, colds, respiratory illnesses and skin problems, and to prepare for labour.

About 80% of the world population prefers to use different types of traditional medicines, including herbal medicines, for the improvement of general wellbeing, and for the prevention and treatment of illnesses (John & Shantakumari 2015:229). Traditional medicine, according to WHO (2012), is defined as "health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illnesses and maintain well-being". Traditional or folk medicine incorporates understanding, approaches and beliefs that are not based on scientific evidence and are used to prevent, diagnose and treat people's illnesses. It is defined by a culture's knowledge and values and is context specific, because it draws on social constructions and negotiations of risk (Moreira, Teixeira, Monteiro, De-Oliveira & Paumagartten 2014:248). Herbal medicine is one aspect of traditional medical practices. Herbal medicines are prepared from plants that are believed to be therapeutic.

Cultural practices refer to the customary expression of ideas, beliefs, values, and knowledge of a group of people who transmit and reinforce such expressions to the group members (CED 2017, sv 'culture' and 'practice'). Cultural practices also refer to routine ways in which people do things, which commonly have a cultural meaning (Bijsterveld & van Dijck 2009:1). Mugomeri et al (2015:5) state that cultural beliefs and practices associated with the use of herbs during pregnancy are important determinants of maternal death during pregnancy in many African countries, including Lesotho. Panganai and Shumba (2016:[3]) point out that 90% of women in Zambia who use herbal medicine to prepare for pregnancy and childbirth do so because of their cultural beliefs. Cultural practices are closely related to the concept of 'remedy', which refers to a medicine or treatment that relieves or cures a disease (MWD 2019, sv 'remedy'). Xu, Rich and Connor (2016:361) state that older members of a community tend to rely on home remedies to treat musculoskeletal pain, as a result of their cultural practices. In Dajak, Roje, Hašpl

and Maglić's (2014:410) study based in England, 57.8% of the respondents used herbal remedies during pregnancy, and these included herbs such as ginger, cranberry, and raspberry leaf.

Herbal medicine is used during pregnancy to relieve gastrointestinal disorders, to ease labour, and as a nutritional supplement (Mekuria et al 2017:2). However, most scheduled herbal medicines state on their information leaflet that the risk of use during pregnancy is unknown. Literature indicates that very little research has been conducted on the safety and efficacy of using herbal medicine during pregnancy and lactation (De Wet & Ngubane 2014:129). Using herbal products during pregnancy that have not been tested in clinical trials (and are therefore unscheduled) could potentially result in immense risk to the mother and foetus. The plant extracts in herbal products contain active molecules that could cause adverse effects, including teratogenicity (John & Shantakumari 2015:234).

1.3 STATEMENT OF THE RESEARCH PROBLEM

Herbal medicines should be used with extreme caution during pregnancy because they may have negative effects on the mother and foetus (John & Shantakumari 2015:229). They are associated with a high incidence of miscarriage and preterm labour (John & Shantakumari 2015:234). Herbal medicines can also possibly interfere with conventional medicines, which may have unknown effects on pregnancy or cause serious complications to the foetus (John & Shantakumari 2015:229). Mugomeri et al. (2015:1) report that 47.2% of pregnant women in Maseru, Lesotho use herbal medicine during pregnancy. They also find that medicinal herb use during pregnancy in their study area (an urban area in Lesotho) was influenced by advice given by grandmothers, traditional healers and mothers-in-law during pregnancy (Mugomeri et al 2015:14). They suggest a further qualitative study to explore the cultural reasons for using herbal medicine in pregnancy. The researcher, who is a midwife in a rural antenatal clinic in Lesotho, has also observed that pregnant women use herbal medicine associated with their cultural practices during pregnancy. Some of these women present with still births and with complications during labour. The cultural reasons for using herbal medicine during pregnancy in this context are unknown; the following research question was therefore asked: *What are the cultural beliefs and practices in relation to using herbal medicine of pregnant women who are attending a rural clinic in Lesotho?* (the statistics is not specific

that maternal deaths were caused by use of herbal medicine and remedies because there was no research done in the country to identify causes of high maternal deaths)

1.4 RESEARCH PURPOSE

The purpose of a study is generated from the research problem and the research question (Brink, van der Walt & van Rensburg 2012:62). The purpose of this study was to explore culturally sensitive health information about the use of herbal medicine by pregnant women in Lesotho, in order to provide culturally sensitive health care advice to these women about the use of herbal medicine during pregnancy.

1.5 RESEARCH OBJECTIVES

Research objectives are formulated to link the identified problem with the purpose and design of the study (Brink, van der Walt & van Rensburg 2018:70). The research objectives for this study were:

- to explore the cultural beliefs related to the use of herbal medicine of pregnant women attending a rural clinic in Lesotho
- to describe the cultural practices related to the use of herbal medicine of pregnant women attending a rural clinic in Lesotho.

1.6 SIGNIFICANCE OF THE STUDY

The study could assist policy makers and health care workers in Lesotho to understand the cultural beliefs and practices that are associated with the use of herbal medicines during pregnancy. This evidence could be incorporated into policies and health care advice material in order to provide culturally sensitive health care advice. It could further assist in helping nurse educators to be more aware of the importance of understanding the cultural beliefs and practices of pregnant women when providing antenatal care to ensure the optimal health of the pregnant woman and the foetus by including this information in the curriculum.

1.7 DEFINITION OF KEY CONCEPTS

The following key concepts related to the study have been identified and defined:

1.7.1 Antenatal care

Antenatal care is bio-psychosocial care provided to pregnant women during pregnancy by midwives and obstetricians to ensure satisfactory foetal and maternal health (Tiran 2012:12). In the context of this study, antenatal care describes the care provided to pregnant women during their visits to a rural clinic in Lesotho.

1.7.2 Antenatal clinic

A clinic refers to an institution, building, or part of a building where ambulatory patients receive health care (Farlex 2019, sv ‘clinic’). An antenatal clinic is a place where care is provided to pregnant women during their visits. The antenatal clinic referred to in this study is a rural clinic in Lesotho.

1.7.3 Beliefs

Beliefs are thoughts and ideas that an individual develops over time, and that are influenced by culture, parents and family (Weller & Pratt 2012:46). In the context of this study, beliefs refer to the influence of family members and the community on the ideas and thoughts developed by pregnant women about using herbal medicine.

1.7.4 Culture

Culture is a learned set of values, beliefs and attitudes common to a group of individuals, a society, an organisation or a profession (Tiran 2012:57). In the context of this study, culture refers to the behaviours and beliefs practised by the Basotho in relation to herbal medicine. Cultural sensitivity means being aware that cultural differences and similarities between people exist without being biased to the persons or groups.

1.7.5 Herbal medicine

Herbal medicine refers to herbs, herbal preparations and finished herbal products that contain active ingredients derived from plants or plant materials that are perceived to have therapeutic benefits (John & Shantakumari 2015:229). Regulated or approved herbal medicine refers to herbal medicines that have been tested and certified safe for human consumption. In this study, herbal medicine is seen as any herb or related product taken during pregnancy by the Basotho to treat different ailments.

1.7.6 *Lipitsa*

The Basotho term *Lipitsa* refers to herbal medicines and remedies prepared for a pregnant woman.

1.7.7 *Phakisane*

The Basotho term *Phakisane* refers to herbal medicine used to increase contractions during labour.

1.7.8 *Phetola*

The Basotho term *Phetola* is used for herbal medicine that is given to a pregnant woman to help to change the position of the baby to ensure a cephalic (head down) presentation during labour.

1.7.9 Practices

A practice is a habitual or customary performance of something (OSASD 2016, sv ‘practice’). In this study, practices refer to the customs or behaviours, or related treatment, associated with the use of herbal medicine during pregnancy.

1.7.10 Pregnancy

Pregnancy is the period from conception to the time of delivery of the baby (Tiran 2012:179). This study focuses specifically on the pregnancies of women visiting a rural clinic in Lesotho.

1.7.11 Remedy

A remedy refers to something, such as a drug or a bandage, that is used to treat a symptom, disease, injury, or other condition (Farlex 2019 Sv 'remedy'). In this study remedy refers to herbal medicines and practices used to treat pregnant women and their unborn babies.

1.8 RESEARCH APPROACH

Grove, Burns and Gray (2013:23) suggest that a qualitative research approach is a holistic one that is used to describe life experiences, events and cultures, and their meanings. A qualitative approach allows the researcher to gather an in-depth understanding of people's beliefs and actions in order to describe them in detail. The researcher used a qualitative approach in order to explore the cultural beliefs of pregnant women in Lesotho and to describe the factors that lead them to use herbal medicines and remedies, in order to gain a better understanding of this phenomenon.

1.9 OVERVIEW OF THE RESEARCH DESIGN AND METHODOLOGY

A brief overview of the research design and methodology is provided below.

1.9.1 Research design

Grove et al (2013:692) state that a research design is the map, blueprint or outline of a study that ensures maximum control over factors that could interfere with the rigour of a study. The researcher used an exploratory, descriptive research design to carefully plan the different aspects of the study, in order to explore the cultural beliefs and describe the

cultural practices of pregnant women attending the selected rural clinic in Lesotho in a logical manner.

1.9.2 Research method

The research method refers to the different techniques and procedures applied to execute the study (Grove et al 2013:707). A brief overview of the research method, which includes the population, sample, data generation and analysis, and the rigour applied, will be discussed below.

1.9.2.1 Population

A target population is a collection of cases that the researcher wants to generalise (Polit & Beck 2012:249), while an accessible population is the collection of cases that comply with the researcher's predetermined criteria and are available. The target population consisted of an average of 50 pregnant women who attended a specific rural clinic in Lesotho each day. The accessible population was pregnant women who attended a rural antenatal clinic at a missionary hospital in Lesotho, and who met the inclusion criteria.

1.9.2.2 Sample and sampling methods

Sampling is the process of choosing a proportion of the population to represent the entire population (Polit & Beck 2012:743). The resulting sample is therefore a subgroup of the population elements that can be used for data generation (Polit & Beck 2012:250). A sample of 15 pregnant women, who were older than 18 years and who attended a rural antenatal clinic in Lesotho, was purposively and conveniently selected. Data saturation was reached after 13 participants; however, the researcher conducted two more interviews after that point to ensure saturation, and thus a sample size of 15 participants was achieved. Grove et al (2013:686 & 705) describe a purposive sample as when the researcher consciously selects the participants who have specific characteristics that are appropriate for answering the research question, while a convenience sample is selected based on the participants' willingness to participate and availability at the time of the data generation.

1.9.2.3 Data generation and analysis

Data generation is an accurate, structured way of gathering the information that is pertinent to the research purpose, specific objectives and hypothesis of the study (Grove et al. 2013: 52). Fifteen semi-structured interviews were conducted to collect data from the study participants. In a semi-structured interview, the researcher prepares a written topic guide (see Addendum H) and asks the participants open-ended questions to allow them to express themselves (Grove et al 2013:271). Data was analysed using Colaizzi's (1978) method of data analysis, which is a qualitative data analysis method that interprets linguistic material to create meaning from the participants' accounts.

1.9.2.4 Trustworthiness

According to Polit and Beck (2012:745) trustworthiness is the level of trust that independent researchers may have in a researcher's qualitative data if the data is assessed according to certain criteria: credibility, dependability, confirmability, transferability and authenticity. Satisfying these criteria assures independent researchers of the rigour of a qualitative study. These criteria, as they pertain to this research study, are discussed in more depth in section 2.6 of Chapter 2.

1.10 RESEARCH SETTING

The research setting refers to the specific place or places at which the data is generated. The choice of the setting is based on the nature of the research question and the type of data required to address it (Brink et al 2012:59). Lesotho has ten districts that have primary, secondary and tertiary health care facilities. Thaba Tseka District is situated in the highlands of Lesotho, where people use horses as the means of transport to travel to the hospital. This study took place in Thaba Tseka District, at a missionary hospital (a private hospital) under the authority of the Christian Heath Association of Lesotho. The clinic services about 50 pregnant women in a day, most of whom are Sesotho speaking.

1.11 ETHICAL CONSIDERATIONS

Ethics in research refers to a system of moral values relating to the procedures followed. Research ethics ensure that researchers adhere to specific rules and behaviours in their conduct towards study participants, employers, sponsors and other researchers (Polit & Beck 2012:727). The researcher adhered to the three Belmont principles (Houser 2015:52–53) — respect to persons, beneficence and justice — which will be discussed in detail in section 2.7 of Chapter 2.

1.12 SCOPE AND LIMITATIONS

The study was conducted in only one district of Lesotho, in the rural highlands, which means that the data generated may not be applicable to other settings. The expression and interpretation of culture are subjective, and it is therefore possible that the participants did not share all the possible details, and that the researcher did not interpret the participants' responses in every possible way. However, the researcher tried to probe as far as possible and believes that rich information was obtained.

1.13 OUTLINE OF THE DISSERTATION

This research report is divided into the following chapters:

Chapter 1: Orientation to the study

This chapter has provided a general introduction and orientation to the research report by describing the background to the research problem and presenting the problem statement, the purpose of the study, the research question and the associated research objectives. Key concepts were defined, and the qualitative research approach, as well as the exploratory, descriptive research design, were discussed. The specific research methods were presented (the sample, data generation and data analysis), after which the trustworthiness of the study and the ethical considerations taken into account were discussed. Finally, the scope and limitations of the study were presented.

Chapter 2: Research methodology

Chapter 2 presents the research design and methodology of the study. It explains the selection of a qualitative approach, and the exploratory, descriptive research design. The purposive, convenience sampling of the participants, and the use of semi-structured interviews to generate data, are explained. The researcher's use of Colaizzi's method of data analysis and interpretation is also explained. Finally, the researcher's efforts to ensure the rigour of the study and to adhere to ethical principles are described.

Chapter 3: presentation of research findings

Chapter 3 presents the findings based on the data obtained from the semi-structured interviews conducted with the 15 participants. The central theme that emerges from the findings is presented, as well as the four categories and nine sub-categories associated with this theme.

Chapter 4: Discussion and literature

In Chapter 4 the research findings are discussed and integrated with the reviewed literature, to determine whether the literature supports or contradicts them. The discussion is structured according to the categories and sub-categories that emerged from the central theme. A personal reflection prefaces the final conclusion to the study.

Chapter 5: Conclusion, recommendations and limitations

Chapter 5 presents an overview of the study, the overall conclusions, and the limitations of the study, and makes recommendations in relation to the findings. The conclusions are drawn from the shared cultural beliefs and practices of pregnant women attending a rural clinic in Lesotho in relation to using herbal medicine.

1.14 SUMMARY OF THE CHAPTER

This chapter has provided a general introduction and orientation to the research report by describing the background to the research problem and presenting the problem

statement, the purpose of the study, the research question and the associated research objectives. Key concepts were defined, and the qualitative research approach and research design discussed. The specific research methods were presented, after which the trustworthiness of the study and the ethical considerations taken into account were discussed. Finally, the scope and limitations of the study were presented. The following chapter presents a detailed analysis of the research design and methodology of the study.

CHAPTER 2

RESEARCH DESIGN AND METHODOLOGY

2.1 INTRODUCTION

This chapter presents the research design and methodology of the study. It explains the researcher's reasons for selecting a qualitative approach, and for selecting an exploratory, descriptive research design. The processes involved in the purposive and convenience sampling of the participants, and in the generation of data through semi-structured interviews, are explained. The researcher's use of Colaizzi's method of data analysis and interpretation is also explained. Finally, the researcher's efforts to ensure the rigour of the study and to adhere to ethical principles are also described.

2.2 RESEARCH PURPOSE AND OBJECTIVES

The research purpose summarises what the researcher intends to achieve from the study; it originates from the research problem and assists the researcher to identify specific research objectives (Polit & Beck 2012:69). The purpose of this study was to explore culturally sensitive health care information about the use of herbal medicine by pregnant women in Lesotho, in order to provide culturally sensitive health care advice to these women about the use of herbal medicine during pregnancy. In order to realise the purpose of the study, the following objectives were formulated:

- To explore the cultural beliefs related to the use of herbal medicine of pregnant women attending a rural clinic in Lesotho
- To describe the cultural practices related to the use of herbal medicine of pregnant women attending a rural clinic in Lesotho.

2.3 RESEARCH DESIGN

The research design is the general plan that the researcher uses to address a research question, and includes the requirement that the researcher must make certain efforts to strengthen the study's integrity (Polit & Beck 2012:743). In this study, the researcher used

a qualitative, exploratory, descriptive research design to understand the underlying cultural beliefs and practices of herbal medicine usage by pregnant women.

2.3.1 Qualitative approach

A qualitative research approach includes several research designs and methods that are used to study the phenomenon in order to generate in-depth information. The researcher's aim with qualitative research is to understand aspects of human experience and the meanings that individuals or groups attribute to a social or human problem (Brink et al 2018:104). Qualitative researchers focus on making sense of nonquantifiable data, and therefore select just a few cases to gain an in-depth understanding. In addition, Brink et al (2018:104) state that qualitative research often involves semi-structured or unstructured searches. The researcher frequently asks open-ended questions or observes behaviours that are more likely to be open-ended (Fouché & Delport 2011:65). The researcher concluded that a qualitative research approach would be suitable for this study as it is flexible and therefore suitable for answering the research questions (which involve *exploration* of cultural beliefs, and *descriptions* of cultural practices). A qualitative approach is appropriate for studying people, especially if the researcher (as is the case in this study) acts as an active listener, whilst the participants, in this case pregnant women, act as the 'experts' when sharing their cultural beliefs and practices regarding the use of herbal medicine. The researcher intended to understand the cultural beliefs and practices that lead to use of herbal medicines and remedies during pregnancy, and so a qualitative approach was deemed appropriate for achieving such understanding.

2.3.2 Exploratory research

When a researcher wants to understand aspects of a phenomenon and increase knowledge about a field without generalisation to large populations, an exploratory study is conducted (Grove et al 2013:694). Researchers in an exploratory study aim to become familiar with people's activities and the ways they express themselves in a certain context (Engel & Schutt, 2010:10). An exploratory research approach assists the researcher to:

- develop tentative theories, speculate and create many ideas;
- prepare questions and refine issues for a more systematic examination of a phenomenon; and
- guide future research and techniques.

An exploratory approach was deemed suitable, as the researcher needed to systematically try to examine the cultural beliefs of pregnant women using herbal medicine, in order to understand how these participants' beliefs shaped their practices in relation to this phenomenon.

2.3.3 Descriptive research

Descriptive research aims at a precise representation of people's characteristics or circumstances, and the frequency with which certain phenomena occur (Polit & Beck 2012:726). Descriptive research aims to describe and document a process, event or an outcome in detail (Houser 2015:138). In addition, qualitative descriptive research is less theoretical than other qualitative approaches, making it easier to design a framework for conducting a study (Kim, Sefcik & Bradway 2017:2). A descriptive study was believed appropriate because this study wanted to describe the cultural practices of pregnant women in Lesotho in relation to the use of herbal medicine. The circumstances under which they practise herbal medicine use were described precisely as far as possible.

2.4 RESEARCH SETTING

The location for conducting research could be in a natural and in a controlled setting (Grove et al 2013:709). The choice of setting for data generation depends on the nature of the research question and the type of data required to address it (Brink et al 2012:59). As indicated in section 1.10, Lesotho consist of ten districts (see Figure 2.1), which are equipped with primary, secondary and tertiary health care facilities. The study took place in the Thaba Tseka District, at a missionary hospital. The clinic at the missionary hospital functions from 8 am to 4 pm, from Monday to Friday. The clinic offers antenatal care services to pregnant women and postnatal care services to mothers after seven days post-delivery, and has an under-five clinic offering services to children from the age of six

weeks to four years, nine months. The clinic is visited by people from the surrounding rural areas, most of whom use horses as means of transport to reach the clinic.

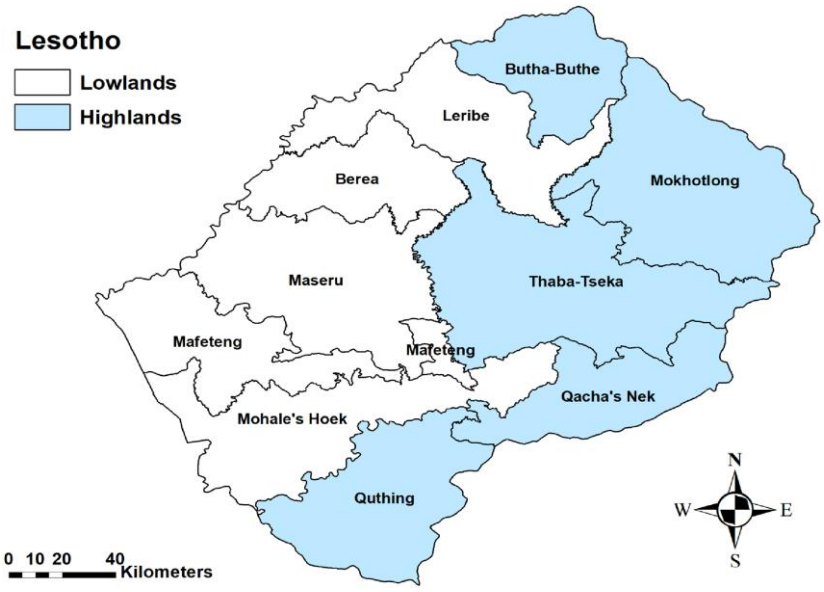

Figure 2.1 Lesotho's ten administrative districts (Lepheana, Oguttu & Qekwana 2018)

2.5 RESEARCH METHODS

The research methods are the steps and procedures followed by the researcher regarding the nature of the data generation and the processes involved (Polit & Beck 2012:733). The place, time and procedures of the data generation and analysis are described. The research methods will be described in the following sections in terms of the population, sample, data generation, data analysis, rigour of the study and ethical considerations.

2.5.1 Population

A population is the entire group of persons or objects that meet the criteria the researcher is interested in studying (Brink et al 2018:116). The target population is the collection of cases that the researcher wants to generalise findings from, while the accessible population is the collection of cases that comply with the researcher's selection criteria and are available (Polit & Beck 2012:249). In this study the target population was pregnant women who attended the selected rural antenatal clinic in Lesotho, and consisted of the approximately 50 patients who visited the clinic each day. The accessible

population was the pregnant women who came for antenatal services on the day the researcher was at the clinic to conduct interviews. These women were included in the population if they were pregnant, aged 18 years or older, and attended the selected rural antenatal clinic in Lesotho.

2.5.2 Sample

The sample is the subgroup of a population consisting of people chosen to participate in a study (Polit & Beck 2012:743). Sampling approaches are classified into two types: probability and non-probability sampling (Polit & Beck 2012:276 & 280). A probability sample is a sample in which every person in the population has an equal chance of being selected, while a non-probability sample in which not every person in the population has an equal chance of being selected (Brink et al 2018:119). The sample for this study was a non-probability, purposive and convenience sample.

Not all participants had an equal chance of being selected. They needed to conform to specific criteria and were selected based on their presence and availability on the day when the data was collected. Creswell (2009:178) suggests that a purposive sample is best when the selected participants have specific knowledge of a particular setting that can assist the researcher in answering the research question. Rubin and Rubin (in Grinnell & Unrau 2011:237) suggest three guidelines for selecting informants when designing any purposive sampling strategy: informants should be knowledgeable about the cultural setting or situation, should have experience of the topic being studied, and should be willing to share their views. The sample in this study included participants who were pregnant, were older than 18 years, were attending the selected rural antenatal clinic in Lesotho, and were willing to participate. They were specifically chosen because of their first-hand knowledge of being a pregnant woman and using herbal medicine, and it was assumed that they would provide the best information under these circumstances.

Regarding the use of a convenience sample, the researcher chose this option since it would be very difficult to use only a purposive sample, considering the challenges the participants may have had regarding transport. Houser (2015:474) describes a convenience sample as one that consists of participants who are available to the researcher.

2.5.2.1 Sample size

The sample size is the number of people who participate in a study (Polit & Beck 2012:743). The sample size was determined by data saturation, that is, the point at which no new information surfaces. Polit and Beck (2012: 521–522) suggest continuing to select participants until the data can pass two tests, namely:

- Completeness: when the participants have shared sufficient information for the researcher to gain an overall sense of the meaning of a concept, theme, or process.
- Saturation: when the researcher no longer elicits new information from subsequent interviews. Data saturation was reached with 13 participants; however, the researcher conducted two more interviews after that point to ensure saturation, and thus a sample size of 15 participants was achieved. The co-coder reached data saturation at 10 participants (see Addendum I).

2.5.3 Recruitment of participants

When recruiting participants, the researcher has to consider the eligibility criteria that have been established for the study before inviting participants to participate (Polit & Beck 2012:286). During the recruiting of participants, the researcher must consider the possible factors that could influence potential participants to agree to or refuse to participate in the study. These could, for example, include a personal attractiveness, being the member of a special group, a financial incentive, and fear of unintended consequences. The researcher therefore decided to obtain consent from the potential research participants without threatening to penalise anyone who refused to participate and without offering inappropriate rewards for their participation, as suggested by Grinnell and Unrau (2011:82).

Permission was obtained from the Lesotho Ministry of Health Research Ethics Committee (see Addendum D), the hospital management (see Addendum E), and the gate keeper (the unit manager) (Addendum E) before approaching the participants. The researcher went to the clinic during the day, when antenatal care was provided and reported to the unit manager indicating the reason for her presence. The unit manager introduced the

researcher and gave permission to invite possible participants who attended the clinic that day to participate in the study. During contact with the potential participants, the researcher introduced herself, explained the purpose of the study and the criteria for inclusion, and pointed out what their participation in the study would entail. They were informed that their participation in the study would be voluntary and that they had the right to refuse to participate. Those participants who were approached did not have any objection and signed the informed consent form (see Addendum G).

2.5.4 Data generation

Data generation refers to the process of gathering information that addresses the research problem (Polit & Beck 2012:725). Data generation is structured and guided by the research purpose, and by the study's specific research objectives and research questions to obtain the relevant information (Grove et al 2013:45). Data generation methods in qualitative research are most often unstructured or semi-structured. Qualitative researchers are the principal instruments of data generation (Grinnell & Unrau 2018:93). The researcher used individual semi-structured interviews with an interview guide that contained open-ended questions (see Addendum H) to generate data. Grinnell and Unrau (2018) state that a semi-structured interview guide may include some specific questions, but should not limit interviewers, who should be able to explore in their own way while still considering the research question being studied. Open-ended questions do not have a defined set of response categories from which participants choose their answers; instead, participants share their responses in their own words.

2.5.4.1 Interview guide

An interview guide is a qualitative instrument used to guide the interviewer by outlining the topics that would address the research question (Rubin & Babbie 2010:104). It allows room for adapting the sequence and wording of questions. Rubin and Babbie (2010:104) explain that an interview guide ensures that should the interview be conducted by different interviewers, the information covered would be the same and the interview would allow for probing into unanticipated circumstances and responses. The researcher, being a professional nurse and midwife, conducted the interviews in person. The participants were not known to the researcher, who used probing questions when it was found that

more in-depth information was needed. The following main question was posed to the participants: "*Please tell me more about the reasons for using herbal medicine when one is pregnant*". As the participants shared their beliefs and practices about herbal use during pregnancy the researcher probed further, by asking further questions and requesting further information (e.g. "*Please elaborate*").

2.5.4.2 Pre-testing of the interview guide

The practice of pre-testing is regarded as an effective technique for improving the validity of qualitative data-generation procedures and instruments, and thus the interpretation of the findings (Hurst, Arulogun, Owolabi, Akinyemi, Uvere, Warth & Ovbiagele 2015:3). Pre-testing helps the researcher to detect errors and to determine whether the research questions asked in fact provide the information that is needed. The researcher pre-tested the interview guide to ensure that the research questions and the method used would elicit the required information from the participants. Five participants were used to test the guide, but they did not form part of the study. After consulting with the study supervisor, the researcher established that the questions were clear and understandable; the process of consulting with the supervisor also gave the researcher an opportunity to test her own interviewing skills as she was a novice at conducting research.

2.5.4.3 Planning of the data

The researcher organised the use of a quiet room in the clinic to be used for conducting the interviews. The day before the interviews the researcher discussed the data-generation process with the nurse in charge. The researcher also ensured that she had the information leaflets (Addendum G), the interview guide (Addendum H), a notebook for the field notes, and voice recorder at hand and in working order. She also prepared herself mentally for this process, as suggested by Polit and Beck (2012:541).

2.5.4.3 Conducting the interview

Before the commencement of each interview, the researcher introduced herself and asked some general questions to put the participants at ease, as suggested by Polit and Beck (2012: 543). In addition, the researcher explained to the participants what the study

was about, determined who was eligible to participate, and explained how the interviews would be conducted. The researcher obtained written consent from all the participants before they were interviewed.

The researcher conducted individual semi-structured interviews following the principles outlined by Taylor and Bogdan (2016:118), which include being non-judgemental, letting people talk, paying attention and being sensitive. She also made sure to practise non-verbal expressions and attitudes of acceptance, such as nods of empathy and a non-judgemental attitude during the interviews. Participants were allowed to express themselves freely during the interview and the researcher paid genuine attention by maintaining eye contact and nodding throughout the interview. The researcher applied the skill of active listening during the semi-structured interviews, which involves being attentive to what the participants say. Active listening is a process whereby the interviewer directly observes and listens to all that is said by the participant, not missing a word. Listening can be defined as the active process of receiving auditory stimuli, which has a meaning to the person listening, who is able to make sense of it (Taylor & Bogdan 2016:118).

As mentioned previously, the interviews commenced with the question, "*Please tell me more about the reasons for using herbal medicine use when one is pregnant*", followed by probing questions, specifically in relation to cultural beliefs and practices. The interviews were conducted in either English or Sesotho and were voice recorded. The interviews conducted in Sesotho were translated into English. The researcher is fluent in Sesotho and English, and thus had a good understanding of the information. The interviews lasted for approximately 30–45 minutes and were conducted between September 2018 and February 2019.

2.5.5 Field notes

Field notes are memos that researchers make after interviewing participants, in which they reflect on their personal experiences (Polit & Beck 2012:549). These notes are both descriptive and reflective (Polit & Beck 2012:521). Field notes were taken to support the interview data during the interviews and described the participants' emotions and behaviours. A participant who had lost her babies in previous pregnancies following the

use of herbal medicine and remedies became emotional and started crying. The researcher as a nurse provided brief counselling and referred her for full counselling to the professional counsellor at the hospital. These notes were included in the data analysis to enrich the data.

2.5.6 The researcher as an instrument

In qualitative research the researcher becomes part of the creation of knowledge and is regarded as a research instrument (Xu & Storr 2012:14). The researcher therefore reflected on her own values and beliefs about herbal use during pregnancy and tried to depict the voices of the participants regarding their beliefs and practices in relation to herbal medicine use during pregnancy.

2.5.7 Data analysis

According to Brink et al (2018:180), data analysis in qualitative research is non-numerical and is usually conducted on and presented in the form of written material, audio and video tapes, and photographs. The analysis of qualitative data involves an examination of texts rather than of numbers. Data analysis is also often performed concurrently with data generation, as was the case in this study. The verbatim transcripts (see Addendum L) and the field notes were analysed using Colaizzi's method of data analysis, as suggested by Holloway and Wheeler (2013:233). Colaizzi's method involves reading each transcript to acquire a sense of the topics, re-reading them to identify and extract significant statements, formulating meanings, clustering the meanings into categories and sub-categories, and grouping them into themes.

Firstly, the researcher listened to the audio recording of the participants carefully several times, after which she transcribed them and reviewed the transcriptions several times in order to gain insight into the participants' views as accurately as possible. Secondly, the researcher extracted important words and sentences relevant to the research questions from the interview transcripts, and developed the concepts they expressed. The first and second steps were performed after each interview. The third step was performed after the researcher had finished all the interviews, when the researcher converted the concepts into codes. During the fourth step, the codes were grouped into specific clusters

of categories and sub-categories. The fifth step involved the researcher developing a central theme, which related to the cultural beliefs and practices that described the topic. The sixth step saw the essential structure of the phenomenon being formulated. The final step involved validation, when the researcher returned to four participants and asked them questions about the findings in order to review them. These four participants affirmed that the results reflected their feelings and experiences entirely and accurately. The researcher also used a co-coder to check whether the central theme, categories and sub-categories generated were similar to those generated by the researcher.

2.6 RIGOUR OF THE STUDY

A qualitative researcher strives to achieve rigour, also referred to as the trustworthiness of the research, in order to confirm that the findings are credible (Noble & Smith 2015:34). The following measures of trustworthiness were applied to ensure rigour: credibility, dependability, confirmability, transferability and authenticity.

2.6.1 Credibility

A criterion for assessing the integrity and quality in qualitative studies, credibility signifies confidence that the data is true (Polit & Beck 2012:724). This criterion was adhered to through employing prolonged engagement, reflexivity, peer examination and member checking, as suggested by Korstjens and Moser (2018:12) and Murphy and Yielder (2010:65). The research proposal was peer reviewed; the researcher spent a lengthy period with the data trying to understand the views expressed by the participants, and the data was carefully assessed by the study supervisor and the co-coder in order to elicit peer input. Furthermore, after the data analysis the researcher went back to four participants as ‘members’ to check whether they agreed with the transcribed data and with the interpretations. The researcher continuously reflected on her personal views and biases, in order to ensure that she reflected the participants’ cultural beliefs and practices as truthfully as possible.

2.6.2 Dependability

Dependability refers to the stability of the data over time and in similar conditions (Polit & Beck 2012:559). A research peer (study leader) monitored the research process and procedures used to check if the findings of the study were acceptable, as suggested by Brink et al (2012:127). The researcher kept detailed records of all documents used during the research process in case an audit should be requested. These documents were systematically labelled to ease the audit process.

2.6.3 Confirmability

Confirmability refers to the neutrality of the data and interpretations. This strategy aimed to ensure that the data presented and interpreted was a true reflection of the information presented by the participants (Polit & Beck 2012:560). Audiotaping, keeping comprehensive field notes and asking another researcher familiar with qualitative research to look at the codes (as a co-coder) were strategies used to ensure confirmability.

2.6.4 Transferability

Transferability refers to whether the findings can be transferred to or be applicable in other settings or other groups (Polit & Beck 2012:747). The researcher provided comprehensive descriptions of the research process and data analysis in order for other researchers to be able to apply them in a similar context. In addition, a purposive sample was employed because the selected participants represented the phenomenon under study, as proposed by Polit and Beck (2012: 739).

2.6.5 Authenticity

Authenticity refers to the extent to which the researcher presents the different realities of the collected data and presents them as the voices of the participants (Polit & Beck 2012:720). The researcher's report described the interview data and field notes as accurately as possible. This is clear in how the report conveys the feeling tone of the participants' lives as they are lived. The text has authenticity when readers are able to

understand the feelings and experiences of the participants, in this case, the beliefs and practices about the use of herbal medicine of pregnant Basotho women.

2.7 ETHICAL CONSIDERATIONS

Ethical considerations relate to a general respect for the participants' rights during data generation and throughout the research study (Polit & Beck 2012:152). Polit and Beck (2017:727) refer to the ethical aspects of a study as a structure of moral values that is concerned with the manner in which the research procedures comply with the professional, legal and social obligations to the participants of the study. The researcher adhered to the three ethical principles that guide researchers: respect for persons, beneficence, and justice. These principles are based on human rights that need to be protected in research (Brink et al 2018:29).

2.7.1 Respect for persons

Adhering to the principle of respect refers to the need for all human beings to be treated with respect. In the context of this study, the participants were patients and pregnant women, and special care and consideration therefore needed to be taken because they are considered vulnerable. The participants were treated with courtesy and respect. Sufficient information about the nature of the study, as suggested by Beckmann (2017:7), was provided to allow them to make an informed decision (Addendum G) about whether or not they wanted to participate. Aspects such as privacy and anonymity were ensured by having the interviews conducted in a private room and by assuring the participants that their identity would not be revealed during any reporting of the study. Numbers were therefore used to identify them, rather than their real names. The co-coder also signed a confidentiality agreement to further protect the participants (Addendum I).

In addition, the researcher obtained permission to conduct the research from the University of South Africa's Department of Health Studies Research Ethics Committee (Rec-012714-039) (Addendum A), from the Lesotho Ministry of Health Research Ethics Committee (Addendum B), and from the manager of the Hospital Nursing Services at the missionary hospital (Addendum C). After approval had been granted by the various stakeholders, the unit manager of the antenatal clinic, who acted as a gatekeeper of the

participants, was approached for permission. All the details of the study were explained to the unit manager prior to the researcher approaching the participants during their clinic visit. The researcher assured the unit manager that the participants would remain anonymous, and that the beliefs and practices shared by the participants would remain confidential and would not to be linked to them in any way. The participants were then invited to take part after the study and the nature of their participation had been explained to them. They were asked to sign an informed consent document to indicate that they understood the nature of their participation and agreed to participate. Table 2.1 depicts the ethical approval process.

TABLE 2.1: AUDIT TRAIL OF THE ETHICAL APPROVAL DOCUMENTS

Research trail	Documents	Date approved
Consent from the University of South Africa (UNISA)	Health Studies Research Ethics Committee approval	06/12/2017
National Research Committee	Permission from the Lesotho Ministry of Health Research Ethics Committee	29/06/2018
Hospital manager	Permission from the hospital manager	27/8/2018
Unit manager	Permission from the hospital manager	27/8/2018
Participants	Signed consent forms	09/2018 – 02/2019
Confidently agreement of co-coder	Co-coder confidentiality agreement	07/5/2019

2.7.2 Beneficence

Beneficence means to do no harm and requires a researcher to try to maximise the benefits for the research project while decreasing the risks to the research subjects (Beckmann 2017:7). The researcher monitored the participants for any signs of distress during the interviews. There was a participant who became emotionally upset during the interview, as she had lost a child during a previous pregnancy following the use of herbal medicine. The researcher as a nurse and midwife provided counselling to the woman and referred her for full counselling to the professional counsellor working in the hospital. This study may benefit future pregnant women, as health care workers will possibly use this information obtained in the study to provide culturally sensitive health care advice to these

women about the use of herbal medicine during pregnancy, and therefore be better able to assist and support them.

2.7.3 Justice

The principle of justice requires the researcher to ensure that the participants are treated in a way that is reasonable, non-exploitative and fair. The costs and benefits to potential research participants must be distributed equally and fairly (Beckmann 2017:7). A purposive and convenience sample was used, whereby participants who were available, willing and met the inclusion criteria were invited to participate. They were also told that they could withdraw from the study at any stage of the process, without any judgement or penalties, but there were no participants who withdrew from this study. The researcher did not discriminate against participants who showed that they were using herbal medicines that could harm their unborn babies and retained a non-judgemental attitude. The researcher's primary goal was to understand their beliefs and practices in relation to herbal medicine use, not to judge them. Where it was indicated, the researcher provided guidance to the participants after the interview was completed.

2.7.4 Research integrity

Research integrity is the process the researcher follows to comply with the approved standards, professional values and practices of the relevant scientific community in order to prevent plagiarism (Kretser, Murphy, Bertuzzi, Abraham, Allison, Boor, Dwyer, Grantham, Harris, Hollander, Jacobs-Young, Rovito, Vafiadis, Woteki, Wyndham, Yada 2019:329). The researcher used a software program (Turnitin) to check the dissertation for plagiarism and tried to the best of her ability to reformulate or paraphrase referenced sources (see Addendum K for the Turnitin report). Data obtained during the study was not manipulated or fabricated. The supervisor and co-coder checked the coding of the data, and the researcher communicated with her supervisor throughout the study to ensure that the correct procedures were being followed.

2.8 CONCLUSION

In this chapter the researcher has presented the research purpose, questions and objectives, and the research design and methodology of the study. The selection of a qualitative, exploratory, descriptive approach has been explained, as has the purposive, convenience sampling of the participants, and the use of semi-structured interviews to generate data. The use of Colaizzi's method of data analysis and interpretation has also been explained. Finally, the researcher's efforts to ensure the rigour of the study and to adhere to ethical principles have been described. The findings based on the data generated will be discussed in the following chapter.

CHAPTER 3

PRESENTATION OF THE RESEARCH FINDINGS

3.1 INTRODUCTION

This chapter presents the findings based on the qualitative data generated by means of semi-structured interviews with the 15 participants. The findings addressed the two research objectives, namely:

- to explore the cultural beliefs related to the use of herbal medicine of pregnant women attending a rural clinic in Lesotho
- to describe the cultural practices related to the use of herbal medicine of pregnant women attending a rural clinic in Lesotho.

The central theme that emerges from the findings is presented, as well as the four categories and nine sub-categories associated with this theme.

3.2 FINDINGS

The findings below present a detailed description of the sample, followed by the central theme that emerged from the data, and then the categories and sub-categories of that theme. The categories and sub-categories are supported by verbatim quotes, indicated in italics, followed by the participant's number, age, gravidity and parity. The reason for including age, gravidity and parity is that participants' beliefs could possibly be associated with more life experience in general, and after a second or third pregnancy, in particular.

3.2.1 Description of the sample

Table 3.1 shows that the participants' ages ranged from 18 to 39 years. The sample consisted of four (4) primigravidae and 11 multigravidae. All of them were married. Their gestational age ranged from 36 to 39 weeks, while most of the participants were 37 to 38 weeks pregnant. Most of the participants (seven (7)) were in the 18–27 years age group, followed by five (5) participants in the 28–37 years age group and three (3) participants

in the 38–47 years age group. The sample characteristics indicate a wide variety of participants in terms of age, gestational age and gravidity, which would imply that rich information was provided. They resided in rural areas of Lesotho that were hard to reach, as their villages were not well developed and did not have good roads for easy access.

TABLE 3.1: SAMPLE DESCRIPTION

Characteristics	**Number**
Number of participants	15
Age groups	
18–27 years	7
28–37 years	5
38–47 years	3
Gravidity	
Primigravida	4
Multigravida	11
Gestational age	
36 weeks	1
37 weeks	5
38 weeks	5
39 weeks	4

3.2.2 The central theme

The central theme that emerged was, '*Women believe that the use of herbal medicine and remedies is a traditional practice that pregnant women need to follow due to culture'*. This belief guided the participants' decisions on whether to use herbal medicine or not during their pregnancies. Four categories under this central theme, with associated sub-categories, are presented below.

3.2.3 Categories and sub-categories

The four categories that emerged from the data were, ‘Cultural beliefs about the use of herbal medicine and remedies’, ‘Cultural practices related to the use of herbal medicine and remedies’, ‘Reasons for using herbal medicine and remedies’ and ‘Dosage and the effects on the unborn baby of the use of herbal medicine and remedies’. From these four categories, nine further sub-categories emerged, as indicated in Table 3.2.

TABLE 3.2: THE CENTRAL THEME, CATEGORIES AND SUB-CATEGORIES

Central theme	Category	Sub-category
Women believe that the use of herbal medicine and remedies is a traditional practice that pregnant women need to follow due to culture.	Category 1: Cultural beliefs about the use of herbal medicine and remedies	• Belief in witchcraft and evil spirits that will harm the unborn baby
	Category 2: Cultural practices related to the use of herbal medicine and remedies	• Traditional practices related to the use of herbal medicine and remedies • Motivation to use herbal medicine and remedies during pregnancy by mothers and mothers-in-law • Access to herbal medicine and remedies
	Category 3: Reasons for using herbal medicine and remedies	• Treatment of illnesses • Use of herbal medicine and remedies during pregnancy • Personal decision to use or not use herbal medicine and remedies during pregnancy • Low-cost remedies and distance of health care centres
	Category 4: Dosage and the effects on the unborn baby of the use of herbal medicine and remedies	• Self-medication in the use of herbal medicine and remedies • Perceptions of the negative effects on the unborn baby

3.2.3.1 Category 1: Cultural beliefs about the use of herbal medicine and remedies

In the category ‘Cultural beliefs about the use of herbal medicine and remedies’, the sub-category, ‘Belief in witchcraft and evil spirits that will harm the unborn baby’ emerged. Participants reported using herbal medicine to protect themselves and their unborn babies from bewitchment. They believed that using herbal medicine and remedies would result in a healthy pregnancy until term, as evident from the following excerpts:

My mother-in-law told me that herbal medicines are supposed to be taken during pregnancy to deliver a healthy baby and prevent illnesses caused by witchcraft, a pregnant woman can skip medications that can affect the baby…" [p2, age 19, P1, G2]

- Belief in witchcraft and evil spirits that will harm the unborn baby

The sub-category 'Belief in witchcraft and evil spirits that will harm the unborn baby' seemed to feature strongly in this setting, especially in relation to pregnant women and their unborn babies. The participants believed that pregnant women who do not take herbal medicine and remedies during pregnancy can be bewitched, resulting in them losing their unborn baby. They believed that community members might become jealous and plan to harm the unborn baby, and that using herbal medicine would prevent this harm. Participant 5, a primigravida, explained as follows:

We again use herbal medicines to protect the child from the witchcraft, culturally when one is pregnant other community members feel jealousy and plan to kill the baby before being born, to prevent that once one notice that she is pregnant… [p5, age 20, P0, G1]

It was believed that using herbal medicines during pregnancy would prevent illnesses caused by bewitchment, as emphasised by Participant 9:

My mother-in-law told me that herbal medicines are supposed to be taken during pregnancy as part of her cultural practice, to have a healthy baby and prevent illnesses caused by witchcraft... [p9, age 26, P1, G2]

Participants believed a pregnant woman could be bewitched by community members who did not want that person to be married into a certain family, thus causing a miscarriage in order to prevent the marriage. The idea of such bewitchment is often related to marrying into rich families, as everyone wishes for their daughter to be married into such families. As result, members of these wealthy families will do anything to prevent ambitious outsider young women from having a child with any of their sons, because it is believed

that a woman shows her value and womanhood by having children to expand the family. Participant 8 said:

> *… protect the mother and the baby from bewitchment which can be done by the members of the community that wanted their daughter to be married by the man who have married the woman. The witches can make the pregnancy not to stay (miscarriage)… [p8, age 39, P0, G1]*

3.2.3.2 Category 2: Cultural practices related to the use of herbal medicine and remedies

The category, 'Cultural practices related to the use of herbal medicine and remedies' during pregnancy addressed traditional practices, motivation to use herbal medicine and remedies, and access to herbal medicine. Participant 1 expressed her views regarding the Basotho herbal and traditional practices as follows:

> *… culturally we as Basotho prevent illnesses that can attack a pregnant mother by using herbal medicines known as 'Lipitsa'*[1] *during labour; the herbal medicine is cooked with egg shell, etc. when prepared to pregnant women... [p1, age 39, P6-1, G7)*

The participants further reported using herbal medicine and remedies because these were cultural practices that had been used by their elders to protect the baby and the mother from evil spirits during pregnancy. They believed strongly that since these practices had helped their elders, it would do the same for them and for the next generation. Participant 7 expressed the importance of using herbal medicine in this way:

Pregnant women use herbal medicine because it is their cultural practice which have been happening since our elders to protect the mother and the baby from evil spirits… (p7, age 23, P1, G2)

The three sub-categories that emerged from the data from category two were: 'Traditional practices related to the use of herbal medicine and remedies', 'Motivation to use herbal

[1] A herbal medicine and remedy prepared for a pregnant woman.

medicine and remedies during pregnancy by mothers and mothers-in-law' and 'Access to herbal medicine and remedies' as displayed in Table 3.2.

- Traditional practices related to the use of herbal remedies and remedies

Participants reported that they are forced by Basotho culture to use herbal medicines and remedies during pregnancy because it is the cultural practice in the family they are married into; hence, they have to follow that practice to show respect to their in-laws, as evident in the following excerpt from Participant 3:

> *After being married, my mother in-law told me the cultural practices that are being done in her family, which included the use of herbal medicines… [p3, age 22, P1, G2]*
>
> *My mother-in-law told me that herbal medicines and remedies are supposed to be taken during pregnancy as part of her cultural practice, to have a healthy baby and prevent illnesses caused by witchcraft... [p9, age 26, P1, G2]*

Participants explained that they had to commence with the use of herbal medicine once their menses stopped, and had to take these herbal medicines as often as they could remember to. Participant 3 explained:

> *When I got pregnant, I told her that I am no longer seeing my days, then she prepared the herbal medicines that I was to start drinking, and she told me to drink them every time when I remember with a mug to protect this pregnancy… [p3, age 22, P1, G2]*

- Motivation to use herbal medicine and remedies during pregnancy by mothers and mothers-in-law

It seemed that older women and mothers-in-law played a significant role in the use of herbal medicine during pregnancy, and motivated for its use, as explained by Participant 1:

We are advised by the mother-in-laws and other old women in the community… [p1, age 39, P6-1, G7]

Mothers-in-law seemed to be very prescriptive regarding the use of herbal medicine and would take the lead once it became known that their daughter-in-law was pregnant, as explained by Participant 4:

… when I started not seeing my periods, my mother-in-law took me to the herbalist who gave us the herbal medicines and instructed us to start them when I am 3 months… [p4, age 19, P0, G1]

The reason provided by the mother-in-law for using herbal medicine during pregnancy was that it would prevent prolonged labour, as described by Participant 2:

My mother-in-law got them from the herbalist and others she digged them by herself… she also told me that the woman who did not use herbal medicines have prolonged labour… [p2, age 19, P0, G1]

Herbal medicines are used for different reasons, as explained by one of the participants. There is herbal medicine that is taken to ensure that the pregnancy is free from minor and major illnesses that occur in pregnant women (*Tsitsisa,* which means making the pregnancy go according to plan, without any problems). Another type of herbal medicine is called *Phetola*, which means changing the foetus position maintained in utero, or rotating the baby. This medicine is taken to ensure a cephalic (head first) presentation during labour, because if the head does not present first, labour could be difficult. A herbal medicine known as *Phakisane* is taken to increase contractions, which is believed to shorten the labour process. Participant 8 explained as follows:

My mother-in-law took me to the herbalist where I was given 'Tsitsisa' and 'Phetola'. Another one was 'Phakisane' which I will take once labour start…" [p8, age39, P0, G1]

- Access to herbal medicine and remedies

Mothers-in-law and grandmothers are the key figures in providing pregnant women with herbal medicine. They facilitate the acquisition of herbal medicines, usually from old women in the villages and traditional healers, as evident from the following excerpt from Participant 1:

> *… We get them from the traditional healers and grandmothers who know those medications… [p1, age 39, P6-5, G7]*

Participant 3 echoed the role of the mothers-in-law in obtaining herbal medicine:

> *… my mother-in-law was preparing them herself, she was digging them from them mountains and some she bought from herbalists such as mercury… [p3, age 22, P1, G2]*

3.2.3.3 Category 3: Reasons for using herbal medicines and remedies

The category 'Reasons for using herbal medicines and remedies' revealed the sub-categories 'Treatment of illnesses', 'Use of herbal medicine and remedies during pregnancy', 'Personal decision to use or not use herbal medicine and remedies during pregnancy' and 'Low-cost remedies and distance of health care centres'.

- Treatment of illnesses

The category 'Treatment of illnesses' focuses on cultural practices and beliefs regarding herbal medicines and remedies to treat illnesses, for example preventing the baby from dying, and treating genital warts or vaginal discharges.

Participant 1 described taking *Lipitsa [a Basotho concept that refers to herbal medicines and remedies prepared for a pregnant woman]* to prevent the membranes from 'bulging' [swelling and increasing in size], as it is believed that bulging membranes cause pain and discomfort for the labouring woman. She explained it as follows:

> *… culturally we as Basotho prevent illnesses that can attack a pregnant mother by using herbal medicines known as 'Lipitsa'... [p1, age 39, P6-5, G7]*

Herbal medicines and remedies are often used to treat illnesses that occur during pregnancy when people do not have health care facilities nearby at which they can consult either a nurse or a doctor, as mentioned by Participant 4:

> *It is also the only ways of treating illness that can happen during pregnancy because we are not having nearby health centre. [p4, age 19, P0, G1]*

Herbal medicines and remedies are further utilised to cure common illnesses that occur during pregnancy, such as genital warts, respiratory illnesses and vaginal discharge, as evident from the following excerpts from Participant 4 and Participant 7:

> *… As you know genital warts are very common in pregnant woman, we use herbs to cure them... [p4, age 19, P0, G1]*

> *Another thing we use them to cure illnesses that happen during pregnancy like genital warts, respiratory problems… [p7, age 23, P1, G2]*

Participant 5 explained that herbal medicines are used to treat vaginal discharge and a reduction in foetal movement:

> *Herbal medicines cure vaginal discharge which is very common during pregnancy. They also assist if there is reduction in foetal movements… [p5, age 20, P0, G1]*

- Use of herbal medicine and remedies during pregnancy

In the category ‘Use of herbal medicine and remedies during pregnancy’, participants reported using herbal medicines and remedies to prevent membranes from ‘bulging’ during labour, as they reported it to be a painful experience that could even threaten the life of the unborn baby. Herbal medicines and remedies were also useful in preventing the placenta from appearing before the baby during delivery (placenta praevia). The participants also explained that preparing the medicine using a ‘key’ would ‘unlock’ the labour process, as witchcraft could prevent normal labour. Participant 4, who was only 19 years of age and was pregnant with her first child, explained this as follows:

It was the herbs that we cook together with the egg shell to prevent the membranes to bulge during labour, the other one was mixed with crystals (small particles from the enamel plate after is been broken) of the plate to prevent placenta to be born before the child during delivery. The other one was cooked with a key to open the opening at the mouth of the uterus when labour start because the witches can close this opening for the pregnant mother to die together with the baby… [p4, age 19, P0, G1]

Participants reported using herbal medicine and remedies to prevent miscarriage by occluding the cervix, because they explained that some cervixes are weak and can open as pregnancy advances, causing miscarriage to occur. They also reported using herbal medicine mixed with mercury to increase contractions during labour so that the labour does not become prolonged. Participant 9 described this in the following way:

I have used with my previous pregnancies we have 'plate' which is used to occlude the opening at the mouth of the uterus to prevent miscarriages, it is done by mixing herbs with crystals of the plate (enamel). There is also egg which is the herbs mixed with egg shell to prevent membranes to dilate during labour. The other one that I remember is the one that prevent genital warts, it is herbs mixed with sorghum. Finally, pregnant woman use 'phakisane', it is the herbs mixed with mercury, it is taken when labour start to speed up contractions. [p9, age 26, P1, G2]

Participants further reported using herbal medicines and remedies to help the baby to rotate, in order to prevent a breech delivery. They explained that most babies who are born breech die. Participant 6 and Participant 3 explained as follows:

… another one is taken as pregnancy advances which is 'Phetola', it helps the baby to turn, so that the head will appear first during labour.' [p6, age 24, P2, G3]

From the fifth month she gave me 'Phetola' which she said is going to rotate the baby, I took it until end of the sixth month… [p3, age 22, P1, G2]

- Personal decision to use or not use herbal medicine and remedies during pregnancy

In the category ‘Personal decision to use or not use herbal medicine and remedies during pregnancy’, it was clear that some participants used herbal medicine and remedies from an early stage of pregnancy while others did not, as they regarded it as dangerous due to previous unpleasant experiences they had had when using it during pregnancy. It seemed that those participants who were pregnant with their first baby were more likely to use herbal medicine and remedies than those who had had previous pregnancies. Participant 6 and Participant 2 stated:

> *I only used them with the first and the second pregnancy, this one I have not used them. [p6, age 24, P2, G3]*

> *I am using them, I started when I was 16 weeks until now… [p2, age19, P0, G1]*

Some participants had found the herbal medicine and remedies to be harmful. They reported not using herbal medicine and remedies because of previous problems they had experienced following such use. Participant 1 reported losing her child during labour due to the effects of herbal medicine and remedies. She stated:

> *I lost the 3rd child during birth and I was told at the hospital it was due to the effects of ‘Lipitsa’… [p1, age 39, P6-5, G7]*

Participant 3 reported having had unbearable contractions during her previous labour due to the effects of the herbal medicine and remedies that she had taken to increase contractions. She reported bearing down prematurely with every contraction. She became very exhausted, even before delivering the baby, as evident from her description:

> *I nearly died when I was delivering my first child. I had contractions that were non-stop, and too much to bear, remember I was only 18 years at that time. I pushed from the first contraction until the baby was born. The baby’s head was swollen++++, I can tell you these herbal medicines are not working instead brings*

us complications. I did not use them with this pregnancy. Every time I am here for the clinic I tell other women my story… [p3, age 22, P1, G2]

Participant 6 reported having lost babies from two previous pregnancies due to the effects of herbal medicine and remedies. She reported having had intrauterine deaths following the use of herbal medicine and remedies, and became very emotional when she said:

… I do not have a live baby, my last hope is this one I am carrying. My children died before they were born, both of them. With the first one I was not attending clinic and delivered at home. The second one died at 28 weeks and was born at the hospital, the nurses asked me if I was using 'Lipitsa' and I told them the truth, then they told me, they are cause of all this deaths of my two children… [p6, age 24, P2, G3]

- Low-cost remedies and distance of health care centres

The category 'Low-cost remedies and distance of health care centres' addresses two reasons for using herbal medicine and remedies: they are not costly and they are easy to access. Due to the poverty that characterises the antenatal clinic's catchment area, participants resort to herbal medicine and remedies to treat illnesses, because the consultations at the hospital are unaffordable for them. As Participant 7 explains:

… These medications are easily accessible at low cost or even without cost… [p7, age 23, P1, G2]

… consultations are expensive at the hospital and we cannot afford [them] because we are not working [p7, age 23, P1, G2]

The participants reported using herbal medicine and remedies because their villages are far away from the health centres where doctors are located. Participant 7 and Participant 8 describe the situation as follows:

'Here in Thaba Tseka most of our villages are far from health care centres and when one is sick we opt for herbal medicines than going to see a doctor. [p7, age 23, P1, G2]

'I am staying at Tlokoeng and takes 8 hours to arrive here at Paray Hospital. [p8, age 39, P0, G1]

3.2.3.4 Category 4: Dosage and the effects on the unborn baby of the use of herbal medicine and remedies

From the category 'Dosage and the effects on the unborn baby of the use of herbal medicine and remedies', two sub-categories were identified: 'Self-medication in the use of herbal medicine and remedies' and 'Perceptions of the negative effects on the unborn baby'. Herbal medicines lack clear instructions or guidelines for use, which according to Participant 9 and Participant 6 has devastating effects on the unborn child and pregnant woman:

There are no measurements. I drink as much as I want. [p9, age 26, P1, G2]

My children died before they were born both of them. With the first one I was not attending clinic and delivered at home. With the second one, died at 28 weeks and was born at the hospital, the nurses asked me if I was using 'Lipitsa' and I told them the truth, then they told me, they are cause of all this deaths of my two children. [p6, age 24, P2, G3]

- Self-medication in the use of herbal medicine and remedies

Herbal medicines and remedies are used without clear dosages, measurements or guidelines for the amount to be ingested, and women are advised to take those used during pregnancy as often as needed, or as often as they remember to. Participant 1 and Participant 8 shared their practices as follows:

There are no measurements. I drink as much as I can. My mother-in-law told me to drink every time I remember… [p1, age 39, P6-5, G7]

There are no measurements. I drink as much as I can. My mother in law told me to drink every time I remember. [p8, age 39, P0, G1]

- Perceptions of the negative effects on the unborn baby

Some participants believed that the use of herbal medicine had a negative effect on unborn babies, while others were unsure. Participant 1 and Participant 10, who had had multiple pregnancies and were older (which might have influenced their perceptions), believed that herbal medicine and remedies negatively affect unborn babies. They stated:

… they have an effect, even though I do not know what exactly but I have experienced with my 3rd child who died before delivery that's why I had to stop using them with the next pregnancies… [p1, age 39, P6-5, G7]

I am not sure because I have never had side effects… they have an effect, even though I do not know what exactly but I have seen many women losing their babies. [p10, age 33, P3, G4]

In contrast, younger participants and those having their first child seemed to be less experienced and were more likely to believe what they were told by their elders. Some participants believed that these cultural practices practised by their elders had no effects on them and their unborn babies. Participant 8 and Participant 9 stated the following:

I do not think they have because is a practice that have been practised even before I was born, it is my culture, my mother in law told me. [p8, age 39, P0, G1]

I am not sure because I have never had of any even with the previous pregnancy. [p9, age 26, P1, G2]

During the interview with Participant 3, she became emotional and cried during when she was asked whether these herbal medicines work. She said:

Hmmm… mum you are opening my old wound when you ask me this question… [p3, age 22, P1, G2]

I nearly died when I was delivering my first child. I had contractions that were non-stop, and too much to bear, remember I was only 18 years at that time. I pushed from the first contraction until the baby was born. The baby's head was swollen++++, did not cry for the whole day, was put in machines for 3 days. Myself I was bleeding vigorously blood that was not clotting, the doctor was called and I was given trips of blood, Mum I can tell you this herbal medicines are not working instead brings us complications… [p3, age 22, P1, G2]

Participant 1 also seemed convinced that she would never use herbal medicines and remedies. Her facial expression supported what she was saying when she indicated that herbal medicines have a negative effect on unborn babies. She said:

… I have experienced with my 3rd child who died before delivery that's why I had to stop using them with the next pregnancies… [p1, age 39, P6-5, G7]

3.3 CONCLUSION

This chapter has presented the findings that emerged from the semi-structured interviews analysed using Colaizzi's (1978) method. One central theme emerged: '*Women believe that the use of herbal medicine and remedies is a traditional practice that pregnant women need to follow due to culture*'. Four categories with associated sub-categories were identified, and were explained and supported by extracts from the transcribed interviews. Chapter 4 will discuss these findings and integrate them with the reviewed literature.

CHAPTER 4

DISCUSSION OF THE FINDINGS

4.1 INTRODUCTION

In this chapter the research findings are discussed and integrated with the reviewed literature, to determine whether the literature supports or contradicts them. The discussion is structured according to the categories and sub-categories that emerged from the central theme: '*Women believe that the use of herbal medicine and remedies is a traditional practice that pregnant women need to follow due to culture'.*

4.2 CENTRAL THEME

The central theme, '*Women believe that the use of herbal medicine and remedies is a traditional practice that pregnant women need to follow due to culture',* reflected the motivation for pregnant women to use herbal medicine as part of Basotho traditional practices. Beliefs and practices are rooted in cultural behaviours and are passed from one generation to the next (Ngomane & Mulaudzi 2012:31). Beliefs have a strong influence on people's behaviour. For example, Mclntyre, Saliba and Moran (2015:4) find that people with anxiety use herbal medicine because they believe that herbal medicine is safe, has limited side effects compared with mainstream medicine, and possesses natural healing powers.

Culture seems to have a great influence on the use of herbal medicine. For example, in Chinese culture traditional herbal medicine is used not only for pregnancy-related conditions but for numerous illnesses. In a double-blind, randomised, placebo-controlled study at a centre that treats diabetic patients, it was evident that the use of Chinese herbal medicines was particularly popular in the rural areas (Lian, Li, Chen, Wang, Piao, Wang, Hong, Ba, Wu, Zhou, Lang, Liu, Zhang, Hao, Zhu, Li, Fang, Liu, Cao, Yan, An, Bai, Wang, Zhen, Yu, Wang, Yuan, & Tong 2014:655). Lian et al (2014) found that certain traditional herbal medicine controlled blood glucose levels and therefore had systemic benefits for diabetic patients. With regard to pregnancy-related conditions, Chinese herbal medicine is used for conditions such as threatened abortion, hyperemesis gravidarum, or

intercurrent diseases. Chinese herbal medicine is also used in cases where mainstream medicine has not been able to provide satisfactory clinical results (Wiebrecht, Gaus, Becker, Hummelsberger & Kuhlmann 2014:2). John and Shantakumari (2015:229) confirm that in the Middle East people rely on herbal medicine rather than mainstream medicine during pregnancy, because they believe that herbal medicine is safer for the foetus. John and Shantakumari (2015: 229) further elaborate that the prevalence of herbal medicine use during pregnancy ranges between 7% and 55% in different geographical areas, social and cultural settings, and ethnic groups. In Europe, North and South America, and Australia, herbal medicine is used to prevent premature labour, to prepare for labour, and for other non-pregnancy-related problems, such as urinary tract infections, water retention, insomnia, gastrointestinal disorders, and restless legs (Kennedy, Lupattelli, Koren & Nordeng 2013:3).

Mekuria et al's (2017:2) study conducted in Northwest Ethiopia at the antenatal clinic at a referral and teaching hospital at the University of Godar, confirmed that the decision to use herbal medicine is influenced by culture. In Maseru, Lesotho, a study on the promoters and reasons for herbal medicine usage during pregnancy indicated that about 55.9% of pregnant women who used herbs, did not have specific reasons for using herbal medicine, other than that it was a cultural practice they had to follow (Mugomeri et al 2015:13). The literature therefore confirms the current study findings that herbal medicine use during pregnancy is common in Lesotho and is related to cultural beliefs and practices.

4.3 CULTURAL BELIEFS ABOUT THE USE OF HERBAL MEDICINE AND REMEDIES

Basotho people believe that herbal medicine and remedies have healing powers, and that they can be used effectively during pregnancy to protect the pregnant woman and unborn baby from evil spirits, and to assist the pregnancy to go to term without any minor or major ailments affecting either the mother or the unborn baby. This belief is strongly related to Basotho cultural practices, and every Mosotho woman is expected to maintain these practices during pregnancy.

The use of herbal medicine during pregnancy and breastfeeding is not unusual in other cultures. In Western Australia breastfeeding mothers use herbal medicine because they believe it can increase breast milk production and promote breastfeeding performance, regardless of whether the person has been diagnosed with insufficient milk supply or not (Sim, Sherriff, Hattingh, Parsons & Tee 2013:2). Sim et al (2013: 4) found that breastfeeding mothers use herbal medicine as a supplement and consider it to be part of their tradition. In Africa, similar findings are evident. For example, Nyeko et al (2016:2) find that herbal medicine is used during pregnancy in Uganda because it is believed to reduce maternal mortality, which is high in this country.

The Basotho believe pregnancy to be prone to bewitchment, hence the necessity of taking herbal medicine to protect both the mother and the baby. They believe that if herbal medicine is used, evil spirits can have no effect, as the demons and ancestral spirits that are responsible for illnesses are eliminated by the medicine. These beliefs are widespread in African culture. In a South African study conducted at the Dilokong Hospital in Limpopo province, Mogawane et al (2015:3) find that once a woman discovers she is pregnant, she starts taking herbal medicines to protect her from witches and evil spirits. The belief in using herbal medicine as protection against evil spirits is not only common during pregnancy but is also used for other illnesses. In a qualitative study conducted among the Yoruba people in Nigeria, Borokini and Lawal (2014:22) find that people consult traditional healers to access herbal medicine because they believe all illnesses are caused by evil supernatural forces, such as witches and sorcerers.

Herbal medicine is used in different countries for a variety of illnesses. These include digestive problems, muscular pain, allergies, glandular fever, depression, insomnia and anxiety (Mclntyre et al 2015:3). Semenya and Potgieter (2014:5) find that in Limpopo the Bapedi use medicinal plants to treat diabetes mellitus, diarrhoea, epilepsy, erectile dysfunction, sexually transmitted diseases, malaria, HIV/AIDS and tuberculosis. In Korea herbal medicine is used for mental health problems, such as anxiety and depression (Hwang, Han, Yoo & Kim 2014:7).

The importance of being aware of people's cultural beliefs and practices regarding the use of herbal medicine and remedies, especially for nurses, is emphasised by Mugomeri et al (2015:11). Nurses could include the possible effects of herbal medicine use in the

health education and health care advice given to patients, especially pregnant women, as the interactions of herbal medicines are not fully known. However, patients might not want to disclose that they are using herbal medicine. If patients do disclose this information, nurses could caution them about possible side effects and would be able to closely monitor the mother and baby, while being sensitive to cultural beliefs and practices.

4.4 CULTURAL PRACTICES RELATED TO THE USE OF HERBAL MEDICINE AND REMEDIES

Cultural practices refer to how people from a particular cultural group commonly do things, and how they attribute meanings to these routines (Bijsterveld & van Dijck 2009:16). Basotho people have cultural practices that they perform once a woman discovers that she is pregnant, in order to protect the mother and the baby. They use different types of herbal medicines and remedies, and these practices are transferred from one generation to the next. Some of the participants did not question these practices because they believed that if they were effective for their elders, and protected them from evil spirits, these practices would also be effective for them. Women are expected to show respect for the Basotho family they marry into by following the family's customs, and pregnant women are expected to follow the family's cultural practices around pregnancy, which usually commence once it is known that a woman is pregnant.

John and Shantakumari (2015: 234) state that herbal medicine is used more frequently during the first trimester, which is probably due to the higher incidence of pregnancy-related problems during this period. The findings of the current study can be compared to those of Mekuria et al (2017:2) from a study conducted in Northwest Ethiopia at a referral and teaching hospital's antenatal clinic, where it was found that the use of herbal medicine and remedies and traditional practices concerning pregnant women were followed as prescribed by their culture.

In the current study, the participants' mothers and mothers-in-law were shown to play a significant role in the use of herbal medicine during pregnancy. These women acquire the herbal medicines, usually from the old women in their villages and from traditional healers. The mothers and mothers-in-law were described as knowledgeable, as they would at

times dig up the herbs themselves. They prescribe these herbal medicines and remedies to the young pregnant women. Mugomeri et al (2015:11) present similar evidence from the Maseru district of Lesotho, finding that for 52.9% of their pregnant participants, herbal medicine was introduced by their grandmothers, 26.5% by traditional healers and 14.7% by mothers-in-law. In further support of this finding, a qualitative study conducted in Limpopo reports that indigenous practices to protect pregnant women are guided by their female elders (Mogawane et al 2015:4). An ethnobotanical survey conducted by De Wet and Ngubane (2014:131) that focuses on lay people's knowledge of plants used to treat gynaecological and obstetric complaints finds that 40% of the respondents reported having obtained their knowledge of herbal medicine from their mothers. A Kenyan study finds that family and friends are the key advisers regarding the use of herbal medicine to improve one's health, and herbalists are the key advisers to consult when someone is ill (Mothupi 2014:3). In contrast, a study conducted in Australia, Europe, North and South America, found that women use their own initiative to find herbal medicines by getting information from magazines, from the Internet and through recommendations from physicians (Kennedy et al 2013:5). It appears that each culture has its own key advisers when herbal medicine and remedies are used, and therefore nurses should be aware of these key figures when providing health care advice.

4.5 REASONS FOR USING HERBAL MEDICINE AND REMEDIES

The reasons for using herbal medicines and remedies related to their believed effectiveness in the treatment of general illnesses and pregnancy-related conditions, their low cost, and convenience (as participants generally lived at a distance from health care facilities). The Basotho people use specific herbal medicine and remedies for pregnant women. These herbal medicines are referred to as *Lipitsa*, *Tsitsisa*, *Phetola* and *Phakisane*, and are used for different reasons during different stages of pregnancy.

Using herbal medicine during pregnancy is also practised in other parts of the world. Shewamene, Dune and Smith (2017:2–3) find that herbal medicine is used widely in African countries to treat pregnancy-related problems. Mekuria et al (2017:2) report that in Ethiopia herbal medicines are used to treat minor disorders of pregnancy, which include nausea, vomiting and respiratory illnesses. Mothupi (2014:3) states that in Kenya, pregnancy-related conditions such as swollen feet, back pain and digestive problems are

treated with herbal medicine. Using different herbs during pregnancy is also common amongst Ghanaian women, who use herbs that are more familiar to the rest of the world, such as ginger, peppermint, thyme, chamomile, aniseed, green tea, tealeaf, raspberry, and echinacea (Peprah, Agyemang-Duah, Arthur-Holmes, Budu, Abalo, Okwei & Nyonyo 2019:2). In Australia, a Westernised country, breastfeeding mothers who had been diagnosed with insufficient breast milk supply and had been prescribed mainstream medicine, refused to use them because they regarded them as harmful and dangerous to take during breastfeeding. These mothers preferred to use herbal medicines because they regarded herbal medicines as safe and natural (Sim et al 2013:5).

The participants reported mixing various substances (referred to as *Lipitsa*) to prevent and treat general illnesses during pregnancy. This herbal medicine is used to treat pregnant women who have vaginal discharge, respiratory problems and genital warts, conditions commonly found in this context. When a woman discovers she is pregnant she is given *Tsitsisa*, which helps to 'settle' the pregnancy, meaning that it prevents miscarriages and abortions. To prevent miscarriages, 'crystal plate' (small particles from an enamel plate after it is broken*)* are given to 'occlude' the cervix (to prevent it opening) because an 'open' cervix can lead to a miscarriage. 'Crystal plate' is also given to prevent placenta praevia. When the pregnancy advances, women are advised to take *Phetola*, which means 'to rotate'. This herbal medicine is believed to ensure a cephalic presentation at birth to make delivery easier. Herbs are mixed with eggshell to prevent membranes from bulging during labour, which is a very painful experience that even leads to premature bearing down. During delivery, *Phakisane* is given (herbs mixed with mercury to speed up contractions). Mercury is a highly toxic substance and may lead to cellular malfunction (Bjørklund, Chirumbolo, Dadar, Pivina, Lindh, Butnariu & Aaseth, 2019:371), and so should therefore be avoided.

Most of the women in the current study who believed in the use of herbal medicine and remedies were primigravidae. The participants who did not use herbal medicine and remedies regarded them as dangerous. They had had previous unpleasant experiences with these substances and were mostly multiparous. Some had lost babies because of using herbal medicine during pregnancy, while others reported that their children had experienced delays in achieving developmental milestones. Some reported having had unbearable contractions during delivery, which had caused severe maternal exhaustion

and had resulted in delivering a baby with a malformed head. These women had had to learn through harsh experience about the negative effects of using herbal medicine and remedies during pregnancy. Antenatal care in relation to the use of herbal medicines and remedies is therefore extremely important, as antenatal care for pregnant women by qualified health professionals reduces maternal and perinatal morbidity and mortality, and the development of pregnancy-related complications (WHO 2016:1).

The participants used herbal medicine and remedies because they were easy to access and were affordable. The participants were from areas of Lesotho with high levels of poverty. In these areas the Basotho people resort to using herbal medicine and remedies to treat many illnesses, as they lack funds to travel the long distances to health care facilities. Most of the participants travelled for about seven hours on horseback from their villages to attend the clinic. Similar evidence was found by Mekuria et al (2017:2) and Shewamene et al (2017:4), who indicate that pregnant women in Africa often use herbal medicine due to its accessibility and low cost, as well as because it is assumed to be more efficient than mainstream medicine. Mothupi (2014:2–3) further supports these findings, stating that in general, rural populations in Africa rely on herbal medicines. Though most studies found accessibility and low cost to be the most important factors in African people choosing to use herbal medicine, Aziato and Antwi (2016:2) point out that Ghanaian people use herbal medicine because they regard it as natural and as having no or minimal side effects, and they lack faith in mainstream medicines.

4.6 DOSAGE AND THE EFFECTS ON THE UNBORN BABY OF THE USE OF HERBAL MEDICINE AND REMEDIES

The participants in this study used herbal medicine and remedies without clear dosages, and took them as they saw fit. This practice could mean that some may have taken very high doses of herbal medicine which had not been tested and could have had adverse effects on them and their unborn babies. It is of concern that the participants reported that they were advised to take these medicines as soon as they discovered that they were pregnant. It is known that the first trimester is a very critical time for the development of the foetus, and it is the period during which congenital malformations are most likely to develop (Laelago 2018:103). John and Shantakumari (2015:234) find that herbal medicine is mostly taken during the first trimester, which is when most women are

unaware of this critical period of foetal organogenesis. Foetal morbidity and mortality can be reduced if care is taken during this period; however, John and Shantakumari (2015:234) indicate that herbal medicines contain numerous active molecules that could cause adverse effects, including teratogenicity.

Apart from the effects of herbal medicine on the foetus, the effect that these medicines could have on pregnant women is unknown. As previously discussed, the multiparous women in this study were of the opinion that these herbal medicines were harmful to themselves and their unborn baby, while nulliparous woman seemed to be ill informed and inexperienced. Some of these participants experienced difficult deliveries and some reported that they suspected that these medicines had affected their children's development.

John and Shantakumari (2017:229) find that the herbal medications are not subject to the strict regulation that mainstream medicines are subject to. In Korea, ethnic minorities use herbal medicine extensively together with mainstream medicine, which complicates the management of these patients. A Ugandan study indicates that herbal medicines have potential adverse effects that are caused by either toxic substances that become part of the ingredients of herbal medicines or by overdosing on herbal medicines, since there are no clear dosages described for their use (Nyeko et al 2016:2). Nyeko et al (2016:2) further indicate that relying on herbal medicine during pregnancy instead of scientifically proven treatment can have serious consequences, such as foetal distress, premature deliveries, intrauterine growth restrictions, decreased foetal survival and congenital malformations. Herbal medicines should be used with caution in pregnancy because they can have detrimental outcomes for the mother and the foetus (Bayisa, Tatiparthi & Mulisa 2014:1; John & Shantakumari 2015:229).

4.7 ROLE OF THE MIDWIFE IN CARING FOR PREGNANT WOMEN IN RELATION TO HERBAL MEDICINE AND CULTURAL PRACTICES

The findings of this study indicate that nurses had informed the participants that the use of herbal medicine was harmful to them and their unborn babies. The participants reported that nurses had told them that the reason for their difficult previous deliveries

and for the developmental problems of their children was due to their use of herbal medicine. They seemed to agree with this view.

The use of herbal medicine during pregnancy constitutes a major challenge for health care providers, who are often not aware of such use. This is because pregnant women hide their use of herbal medicine since the practice is not supported by health care providers (John & Shantakumari 2015:229). Health care providers should encourage disclosure of the use of herbal medicine by pregnant women because the use of herbs and their interactions with prescribed medications may cause serious complications in the foetus. It is the nurse's responsibility to provide the best antenatal and postnatal care to ensure a healthy mother and baby. Nurses and midwives should respect the cultural beliefs and practices of patients, and should provide holistic care to pregnant women regardless of whether they are using herbal medicines. Mekuria et al (2017:7) emphasise that communication between health care providers is crucial. It should be acknowledged that pregnant women may use herbal medicine, and active conversation regarding the harmful effects on both the mother and the baby should be encouraged (Aziato et al 2016:2).

4.8 CONCLUSION

This chapter has presented the discussion of the findings of the 15 semi-structured interviews and has integrated these findings with the literature. The central theme ('*Women believe that the use of herbal medicine and remedies is a traditional practice that pregnant women need to follow due to* culture') with its associated categories and sub-categories were discussed. The following chapter will present the conclusions, limitations and recommendations of the study.

CHAPTER 5

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

Chapter 4 discussed the research findings and integrated them with the literature. This chapter presents an overview of the study, the overall conclusions, and the limitations of the study, and makes recommendations in relation to the findings. The conclusions are drawn from the shared cultural beliefs and practices of pregnant women attending a rural clinic in Lesotho in relation to using herbal medicine. A personal reflection prefaces the final conclusion to the study.

5.2 OVERVIEW OF THE STUDY

The purpose of this study was to explore culturally sensitive health information about the use of herbal medicine by pregnant women in Lesotho, in order to provide culturally sensitive health care advice to these women about the use of herbal medicine during pregnancy. To realise this purpose, the following objectives guided the study:

- to explore the cultural beliefs related to the use of herbal medicine of pregnant women attending a rural clinic in Lesotho
- to describe the cultural practices related to the use of herbal medicine of pregnant women attending a rural clinic in Lesotho.

The study used a qualitative, exploratory and descriptive design to understand the underlying cultural beliefs and practices of herbal medicine usage in pregnant women. One central theme emerged from the data: '*Women believe that the use of herbal medicine and remedies is a traditional practice that pregnant women need to follow due to culture*'. Four major categories emerged from the central theme: '*Cultural beliefs about the use of herbal medicine and remedies'*, '*Cultural practices related to the use of herbal medicine and remedies'*, '*Reasons for using herbal medicine and remedies'* and '*Dosage and the effects on the unborn baby of the use of herbal medicine and remedies'*. Nine further sub-categories emerged from these categories, as discussed in section 3.3.3.

5.3 OVERALL CONCLUSIONS

The overall conclusions are discussed.

5.3.1 Cultural beliefs and practices related to the use of herbal medicine and remedies

Basotho people generally believe in using the healing properties of herbal medicine rather than mainstream medicine during pregnancy. They believe herbal medicines and remedies are very effective in protecting pregnant women and their unborn babies from harm caused by magical spells that release evil spirits, and in assisting the pregnancy to go to term by treating any minor or major ailments that affect the mother or the unborn baby. Although not all Basotho women subscribe to the cultural beliefs and practices associated with using herbal medicine and remedies during pregnancy, these beliefs and practices seem to be strongly rooted in many of them, as they are 'their practice' and are passed on from one generation to the next. These cultural practices commence once the woman discovers that she is pregnant and continue throughout the pregnancy. Different types of herbal medicine and remedies are used to protect the mother and the unborn baby from evil spirits. Senior female family members, in particular mothers-in-law and grandmothers, play an important role in these practices.

It is clear that cultural beliefs and practices related to the use of herbal medicine and remedies during pregnancy are firmly established in the Basotho culture, and originate from the belief that evil spirits could harm a pregnant woman and her unborn baby. Using particular herbal medicines and remedies, and following specific practices, prevents possible harm such as abortion and complications during delivery.

5.3.2 Reasons for using herbal medicine and remedies

Various mixtures of mostly herbal substances that sometimes include toxic elements such as mercury are used for pregnancy-related conditions. The reasons provided by the participants for using these substances include the treatment of genital warts, respiratory problems and vaginal discharge; the promotion of contractions during labour; the rotation of the baby to prevent a breech delivery; and the prevention of membrane 'bulging'. The

herbal medicines are easily accessible and carry little or no cost; in contrast, health care facilities where the pregnant women can see a doctor or have access to mainstream medicine are far away and are expensive. Certain participants believed that some of these herbal medicines had had a detrimental effect on their pregnancies and children.

The interviews with the participants suggested that most Basotho women choose to use herbal medicine during pregnancy rather than mainstream medicine largely as a result of their cultural beliefs and practices. However, not all participants agreed with these practices, citing the harm they had caused. The accessibility and low cost of herbal medicine and remedies also seemed to be a contributing factor.

5.3.3 Dosage and the effects on the unborn baby of the use of herbal medicine and remedies

Herbal medicine and remedies are used without clear dosages. Pregnant women may take any amount they wish, and may even take them during the first trimester when the foetus is most susceptible to harmful effects. Most of the participants who used these medicines and practices were primigravidae, while the multiparous women were more sceptical about their use because of their previous experience of unpleasant and detrimental effects after using them. Nurses had also advised them not to use herbal medicine and remedies during pregnancy again.

The use of herbal medicines seemed to be strongly related to advice given by senior female family members. Some participants believed that these cultural practices had been practised for generations without any effect on their elders, and would therefore be suitable for them as well. However, the safety and effectiveness of herbal medicines, and clear dosages for their use during pregnancy, had never been determined. In this study, primigravidae blindly trusted the advice of their elders during this uncertain period of their life, whereas multiparous participants questioned the use of herbal medicine and practices as they had experienced that it could be harmful to the unborn baby and to themselves, and had understood the advice from nurses.

5.3.4 The role of the midwife in caring for pregnant women in relation to herbal medicine and cultural practices

Those participants who did not fully believe in the Basotho cultural practice of using herbal medicine during pregnancy had been advised by nurses that this practice could have a detrimental effect on pregnant women and unborn babies. This evidence highlights the important role that nurses and midwives play when providing health education to pregnant women. It is critically important, therefore, that nurses and midwives understand the rationale behind the cultural practice of using herbal medicine, in order to be in a better position to provide culturally sensitive health care advice. Brooks, Manias and Bloomer (2019:289) emphasise that health care workers should be sensitive when communicating cultural aspects that relate to health and propose that they should be better prepared for addressing such delicate issues. Brooks et al (2019:283) suggest that it is important that health care workers understand their patients' culture. The findings of the current study provide some insight into why and when Basotho people use herbal medicine and remedies during pregnancy. This information would allow nurses and midwifes to provide culturally sensitive health information to pregnant Basotho women.

5.4 STUDY LIMITATIONS

The study was conducted only in the highlands of Lesotho, and in one district, which means that the data may not be applicable to other settings. However, the researcher attempted to provide a detailed description of the research process and study findings should it be relevant to other settings.

The researcher who collected the data is a professional nurse and midwife, which may have influenced the participants' willingness to share information concerning their beliefs and practices in relation to the use of herbal medicine and remedies during pregnancy. The researcher found it challenging in some instances to obtain information, in spite of concerted probing. This could be attributed to the participants' cultural practice of showing respect for their elders (and therefore not being overly familiar or talkative) and to the participants' fear of being judged for disclosing their practices of using herbal medicine, and their perception that such judgement may have led to them not getting appropriate medical care at the clinic. However, the researcher believed that she obtained rich

information that allowed her to understand what should be considered when culturally sensitive health information needs to be provided to pregnant Basotho women.

5.5 RECOMMENDATIONS

The following recommendations are based on the findings of this study and are made for clinical practice, nursing education and further research.

5.5.1 Recommendation for nursing practice

For nursing practice, the following is recommended:

- Policy makers should consider these findings regarding cultural beliefs and practices related to using herbal medicine during pregnancy when revising policies, in order to provide the best maternal child care.
- These cultural beliefs and practices regarding herbal medicine use and remedies should be included in health education packages to educate pregnant women on the effects of herbal medicines on the foetus and the mother. Mothers could then make informed decisions about whether to use herbal medicines during pregnancy.
- Whenever public gatherings in the community are held, nurses should include health education talks about the adverse effects on mothers and unborn babies of using herbal medicine during pregnancy. This information would then also be received by senior women (such as mothers-in-law and grandmothers), who often encourage, initiate and facilitate the use of herbal medicines during pregnancy.
- Nurses should consider including mothers-in-law and traditional healers as partners in providing antenatal and postnatal care.
- Nurses could include the possible effects of herbal medicine use in the health education and health care advice given to patients, especially pregnant women, as the interactions of herbal medicines are not fully known.
- Community health nurses should include herbalists and traditional healers when discussing and debating the effects of these herbal medicines, and should encourage them to prescribe specific doses when herbal medicine is used.

5.5.2 Recommendation for nursing education

For nursing education, the following is recommended:

- Information on the cultural beliefs and practices regarding the use of herbal medicine and remedies during pregnancy should be included in the nursing curriculum for to empower student nurses to provide culturally sensitive health information.
- Nurse educators could facilitate this topic by using role play, discussions and debates as teaching strategies.
- Students could also initiate a project with senior women in the community to create awareness of the advantages and disadvantages of using herbal medicine and remedies during pregnancy.

5.5.3 Recommendations for future research

The following additional research could be conducted:

- An intervention study to create awareness about the use of herbal medicine during pregnancy could be conducted in the same setting to determine the effect when culturally sensitive health care advice is imparted.
- A qualitative study could be conducted on senior Basotho women (particularly mothers-in-law and grandmothers) and traditional leaders regarding the possible harmful effects of herbal medicine during pregnancy, and on prescribing safe dosages.
- A quantitative study could be conducted to design and validate a health information leaflet on the Basotho beliefs and practices in relation to the use of herbal medicine during pregnancy. This leaflet could be aimed at pregnant Basotho women, senior Basotho women, and traditional healers.

5.6 PERSONAL REFLECTION

I chose to explore the cultural beliefs and practices related to the use of herbal medicine during pregnancy as a research topic following unpleasant experiences with pregnant

women who had lost babies during their pregnancies and labour due to the negative effects of herbal medicines and remedies. As a nurse midwife, I had worked for seven years in a maternity and obstetric unit when I commenced this study. I had witnessed many still births, neonatal deaths and maternal deaths following the consumption of herbal medicine. When trying to find out why women do not stop using herbal medicine, I discovered that it is a cultural practice that they feel bound to follow.

I now work at a nursing college, where I accompany nursing and midwifery students in the clinical field. I have discovered that there is still a high neonatal and maternal mortality rate following the use of herbal medicines and remedies during pregnancy, despite all the health education given at antenatal clinics discouraging the use of herbal medicine. Pregnant women still use herbal medicines and do not disclose its use. It is only shared when complications arise, and their reasoning is that it is their cultural practice.

I decided to register for a Master of Public Health degree so that I could be part of policy making and decision making in the health care sector. This was not an easy road, as it was the first time that I had conducted a qualitative study and I found it to be very challenging. I also encountered the challenge of my proposal sitting for a very long time with the Lesotho Research Ethics Committee before being reviewed, despite repeated efforts to follow up. It took close to six months before I was given a certificate that allowed me to conduct interviews. This delayed the whole research process and prolonged my studies. The other challenge was with data analysis, as it was not easy for me as a novice researcher to transcribe and code data. With the support of my supervisor I successfully overcame all those difficulties.

5.7 CONTRIBUTION OF THE STUDY

The study focused on exploring the Basotho cultural beliefs and practices related to the use of herbal medicine and remedies during pregnancy. The findings of this study indicate that cultural customs are powerfully entrenched, especially for primigravidae, who are uncertain and inexperienced, and tend to follow the traditional advice given by senior female family members. The study shows that nurses play a vital role in informing pregnant women that the use of herbal medicine is harmful to them and their unborn babies, and emphasises that without a sensitive understanding of a community's cultural

beliefs and practices, successful health care provision will remain a challenge. It further underlines the importance of conducting further research on the dosage and ingredients of this herbal medicine, and on how key role players in the community, such as senior women and traditional healers, could be included in antenatal and postnatal care.

5.8 CONCLUSION

This study explored the cultural beliefs and described the cultural practices related to the use of herbal medicine by pregnant women in Lesotho. It was found that many Basotho women feel bound by their cultural traditions to use herbal medicine and remedies during pregnancy, but that their age and experience (assessed in terms of gravida and parity) moderated the extent to which they felt pressured by culture. Women who are older and higher in parity tend not to think herbal medicine should be used because of previous unpleasant pregnancy experiences related to its use, and tend to regard herbal medicine as harmful to both the mother and the unborn child. It is primarily younger women who believe that herbal medicines should be taken because it is the cultural practice they are obliged to follow. Herbal medicine is taken randomly without a prescribed dosage, especially during the first trimester of pregnancy. This information is valuable for nurses and midwives, as it can assist them in providing sensitive, appropriate and effective health care advice to pregnant Basotho women to ensure healthy mothers and babies.

It can therefore be concluded, having revealed the cultural beliefs and practices related to the use of herbal medicine by pregnant Basotho women, that culturally sensitive health information needs to be provided to pregnant women.

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ADDENDUM A

Research Ethics Committee approval: Department of Health Studies

REC-02714-039 (NHREC)

UNISA university of south africa

RESEARCH ETHICS COMMITTEE: DEPARTMENT OF HEALTH STUDIES

REC-012714-039 (NHERC)

6 December 2017

Dear Thakanyane Juliah Lekhotsa

Decision: Ethics Approval

HSHDC/812/2017
Thakanyane Juliah Lekhotsa

Student No.:5113-471-3
Supervisor: Dr HC de Swardt
Qualification:
Joint Supervisor:

Name: Thakanyane Juliah Lekhotsa

Proposal: Exploring cultural beliefs and practices for the use of herbal medicine and remedies during pregnancy in Lesotho

Qualification: **MPCHS94**

Thank you for the application for research ethics approval from the Research Ethics Committee: Department of Health Studies, for the above mentioned research. Final approval is granted from 6 December 2017 to 6 December 2019

The application was reviewed in compliance with the Unisa Policy on Research Ethics by the Research Ethics Committee: Department of Health Studies on. 6 December 2017

The proposed research may now commence with the proviso that:

1) *The researcher/s will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.*

2) *Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to the Research Ethics Review Committee, Department of Health Studies. An amended application could be requested if there are substantial changes from the existing proposal, especially if those changes affect any of the study-related risks for the research participants.*

University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150

3) *The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study.*

4) *[Stipulate any reporting requirements if applicable].*

Note:
The reference numbers [top middle and right corner of this communiqué] should be clearly indicated on all forms of communication [e.g. Webmail, E-mail messages, letters] with the intended research participants, as well as with the Research Ethics Committee: Department of Health Studies.

Kind regards,

Prof JE Maritz
CHAIRPERSON
maritje@unisa.ac.za

Prof MM Moleki
ACADEMIC CHAIRPERSON
molekmm@unisa.ac.za

Prof A Phillips
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ADDENDUM B

Letter of request to Lesotho Ministry of Health Research Ethics Committee

Box 401
Mazenod 160
Maseru 100
Lesotho

5/3/18

The Director
Research Ethics Committee
Ministry of Health
Maseru
Lesotho

RE: A LETTER OF PERMISSION TO CONDUCT THE STUDY

Dear Sir/ Madam

I Thakanyane Lekhotsa, I am a Clinical Supervisor at Roma College of Nursing and also a part-time Master's student in the Department of Health Sciences at the University of South Africa. In fulfilment of requirements for the Master's degree, I have to undertake a research project. The topic that I wanted to research is, "Exploring cultural beliefs and practices for the use of herbal medicine and remedies during pregnancy in Lesotho".

I am kindly requesting permission to undertake my research project at Paray Mission Hospital. The aim of this study will be to provide culturally sensitive health information about the use of herbal medicine by pregnant women in Lesotho. This study results will help the policy makers and health care workers to understand the cultural reasons that are associated with the use of herbal medicines during pregnancy. The University of South Africa, Department of Health Studies Research Ethics Committee have approved the proposal as per attached certificate.
Your permission will be highly appreciated

Yours Sincerely
Mrs Thakanyane Juliah Lekhotsa
+266 580 43931
51134713@mylife.unisa.ac.za or tmachake@yahoo.com

Study Supervisor:
HC de Swardt
012 426 4605
dswarhc@unisa.ac.za

Chairperson of the University of South Africa, Department of Health Studies Research Ethics Committee
Prof JE Maritz
maritje@unisa.ac.za

ADDENDUM C

Letter of request to conduct study at Paray Mission Hospital

Box 401
Mazenod 160
Maseru 100
Lesotho

Manager Hospital Nursing Services
Paray Mission Hospital
Thaba Tseka
Lesotho

Dear Sir/ Madam

I Thakanyane Lekhotsa, I am a Clinical Supervisor at Roma College of Nursing and also a part-time Master's student in the Department of Health Sciences at the University of South Africa. In fulfilment of requirements for the Master's degree, I have to undertake a research project. The topic that I wanted to research is, "Exploring cultural beliefs and practices for the use of herbal medicine and remedies during pregnancy in Lesotho".

I am kindly requesting permission to undertake my research project in your institution. The aim of this study will be to provide culturally sensitive health information about the use of herbal medicine by pregnant women in Lesotho. This study results will help the policy makers and health care workers to understand the cultural reasons that are associated with the use of herbal medicines during pregnancy.

I hereby request your permission to conduct semi-structured interviews with patients attending the antenatal clinic at your hospital. The interviews will be conducted in the antenatal clinic, lasting for approximately 30 - 45 minutes. Only those patients, who agreed to participate, will be interviewed.

The University of South Africa, Department of Health Studies Research Ethics Committee have approved the proposal.
Yours Sincerely

Mrs Thakanyane Juliah Lekhotsa
+266 580 43931
51134713@mylife.unisa.ac.za or tmachake@yahoo.com

Study Supervisor:
HC de Swardt
012 426 4605
dswarhc@unisa.ac.za

Chairperson of the University of South Africa, Department of Health Studies Research Ethics Committee
Prof JE Maritz
maritje@unisa.ac.za

ADDENDUM D

Permission letter from the Lesotho Ministry of Health Research Ethics Committee (ID61-2018)

LESOTHO

Ministry of Health
PO Box 514
Maseru 100

REF: ID61-2018

Date: June 29, 2018

Category of Review:
[x] Initial Review
[ ] Continuing Annual Review
[ ] Amendment/Modification
[ ] Reactivation
[ ] Serious Adverse Event
[ ] Other _____

To
Thakanyane Juliah Lekhotsa
MA student
University of South Africa

Dear Thankanyane,

RE: Exploring cultural beliefs and practices for the use of herbal medicine and remedies during pregnancy in Lesotho

This is to inform you that the Ministry of Health Research and Ethics Committee reviewed and **APPROVED** the above named protocol and hereby authorizes you to conduct the study according to the activities and population specified in the protocol. Departure from the approved protocol will constitute a breach of this permission.

This approval includes review of the following attachments:
[x] Protocol dated June 2018
[x] English & Sesotho consent forms dated June 2018
[x] Data collection forms/ questionnaires in English & Sesotho dated June 2018
[ ] Data collection forms/question guide in English
[ ] Participant materials *[insert types, versions, dates]*
[ ] Other materials: CVs of study team members
This approval is **VALID** until June 28, 2019.

Please note that an annual report and request for renewal, if applicable, must be submitted at least 6 weeks before the expiry date.

All serious adverse events associated with this study must be reported promptly to the MOH Research and Ethics Committee. Any modifications to the approved protocol or consent forms must be submitted to the committee prior to implementation of any changes.

We look forward to receiving your progress reports and a final report at the end of the study. If you have any questions, please contact the Research and Ethics Committee at rcumoh@gmail.com (or) 22226317.

Sincerely,

Dr. Nyane Letsie
Director General Health Services

Dr. A. Ranotsi
Chairperson NH- IRB

ADDENDUM E

Permission letter from the hospital

Paray Mission Hospital
AND SCHOOL OF NURSING

P.O.Box 2
Thaba-Tseka 550
Lesotho

27th August 2018

Mrs. Thakanyane Juliah Lekhotsa

P.o. Box 401

Mazenod 160

Maseru

Dear Mrs Lekhotsa,

RE: Permission to conduct semi-structured interviews with patients attending the antenatal clinic at Paray Mission Hospital

After looking closely at your proposal approved by Research Ethics Committee: Department of Health Studies at The University of South Africa and by the Ministry of Health Research and Ethics Committee, Paray Mission Hospital also finds it suitable to grant you permission to undertake your research project.

The study will benefit all relevant stakeholders on matters concerning pregnant women in Lesotho. I wish you success in your studies.

Yours Sincerely.

Sr. Callixtina Maepa
Manager Hospital Nursing Services

MANAGER HOSPITAL NURSING SERVICES
P.O. Box 2
Thaba - TSeka
27 AUG 2018
CELL: +266 6366 7760
PARAY HOSPITAL

Tel/Fax:(+266)22 900256, Tel:(+266) 22900436, E-mail: paray@ilesotho.com
Website: www.paray.co.ls

ADDENDUM F

Confidentiality binding form researcher and co-coder

ADDENDUM F: CONFIDENTIALITY BINDING FORM

Title of Research Project: Exploring cultural reasons of herbal medicine usage during pregnancy in Lesotho

Principal Researcher: Mrs. Thakanyane Juliah Lekhotsa

As a researcher, I understand that I will have access to confidential information about study site and participants. By signing this statement, I am indicating my understanding of my responsibilities to maintain confidentiality and agree to the following:

• I understand that names and any other identifying information about study sites and participants are completely confidential.

• I agree not to divulge, publish, or otherwise make known to unauthorized persons or to the public any information obtained in the course of this research project that could identify the persons who participated in the study.

• I understand that all information about study sites or participants obtained or accessed by me in the course of my work is confidential. I agree not to divulge or otherwise make known to unauthorized persons any of this information, unless specifically authorized to do so by approved protocol in response to applicable law or court order, or public health or clinical need.

• I understand that I am not to read information about study sites or participants, or any other confidential documents, nor ask questions of study participants for my own personal information but only to the extent and for the purpose of performing duties on this research project.

Mokhele 01/01/2020

Signature Date

CONFIDENTIALITY AGREEMENT

CONFIDENTIALITY AGREEMENT WITH REGARDS TO INDEPENDENT CODING OF DATA FOR THE STUDY

EXPLORING CULTURAL BELIEFS AND PRACTICES FOR THE USE OF HERBAL MEDICINE AND REMEDIES DURING PREGNANCY IN LESOTHO

I understand that identities of all participants are personal and confidential and may not be revealed to any person.

I understand that the research design and method of this study are intellectual property of the researcher(s).

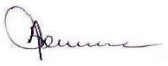
I understand that all material received for coding is personal and confidential.

I understand that all material received will be deleted on completion consensus discussion with researcher(s).

I undertake herewith to treat the following information with utmost professional confidentiality:

a) The name of each participant wherein a name is indicated
b) Material received
c) Content of the information made known to me of each person
d) Content of the research design and method of this study

Independent Coder Name: Dr Annie Temane

Signature: 

Date: 28 April 2019

Researcher's name: .....

Researcher's signature: .....

Date: .....

ADDENDUM G

Information leaflet and informed consent

ADDENDUM G: INFORMATION LEAFLET AND INFORMED CONSENT

RESEARCH PROJECT TITLE: EXPLORING CULTURAL BELIEFS AND PRACTICES FOR THE USE OF HERBAL MEDICINE AND REMEDIES DURING PREGNANCY IN LESOTHO

Primary investigator: Thakanyane Juliah Lekhotsa
Study Leader: Dr H C de Swardt

Dear Research Participant,

You are invited to participate in a research study that forms part of my formal Master's studies. This information leaflet will help you to decide if you would like to participate. Before you agree to take part, you should fully understand what the study is about. You should not agree to take part unless you are completely satisfied with all aspects of the study.

WHAT IS THE STUDY ALL ABOUT?

This study will attempt to understand the underlying beliefs and practices of herbal medicine usage in pregnant women attending a rural clinic in Lesotho. The purpose of this study is to explore culturally sensitive health information about the use of herbal medicine by pregnant women in Lesotho, in order to provide culturally sensitive health care advice to these women about the use of herbal medicine during pregnancy.

WHAT WILL BE REQUIRED OF YOU TO DO IN THE STUDY?

If you decide to take part in the study, you will have to sign the informed consent form and take part in a face-to face interview for about 30-45 minutes giving your opinion on cultural reasons why pregnant women use herbal medicine. With your follow up visit to the clinic, the researcher would like to ask you whether you agree with the recorded information.

CAN ANY OF THE STUDY PROCEDURES RESULT IN PERSONAL RISK, DISCOMFORT OR INCONVENIENCE?

The study involves a 30-45 minute interview that will be recorded. Should you experience any discomfort during the interview, it will be discontinued. If you have any further questions, the researcher is a midwife that could assist or refer you to a relevant person of the multi-disciplinary team.

WHAT ARE THE POTENTIAL BENEFITS THAT MAY COME FROM THE STUDY?

You can help health care workers to be better informed about the usage of herbal medicine use during pregnancy to give the right health education to pregnant women.

WILL YOU RECEIVE ANY FINANCIAL COMPENSATION OR INCENTIVE FOR PARTICIPATING IN THE STUDY?

Unfortunately, you will not be paid to participate in the study.

WHAT ARE YOUR RIGHTS AS A PARTICIPANT IN THIS STUDY?

Your participation in this study is entirely, voluntary and you are under no obligation to participate. You have the right to withdraw at any stage without providing any reason for your decision. Your future treatment will not be affected by taking part in this study.

HOW WILL CONFIDENTIALITY AND ANONYMITY BE ENSURED IN THE STUDY?

All information that you provide during the study will be strictly confidentially. This means that access to your information will be limited to the researcher, the supervisor of the study and the designated examiners (appointed by University of South Africa). The study data will be coded so that it will not be linked to your name. Your identity will not be revealed when the study is reported in scientific journals. All the data sheets that have been collected will be stored in a secure place.

IS THE RESEARCHER QUALIFIED TO CARRY OUT THE STUDY?

The researcher is a qualified nurse practitioner with 8 years of experience in midwifery and is been supervised by qualified study leader at the University of South Africa.

WHO CAN YOU CONTACT FOR ADDITIONAL INFORMATION REGARDING THE STUDY?

The primary investigator, Mrs Thakanyane Juliah Lekhotsa can be contacted during office hours at Tel (+266) 58043931 or at 51134713@mylife.unisa.ac.za. The study leader, Dr H C de Swardt can be contacted during office hours at Tel (012) 429 4506 or at dswarhc@unisa.ac.za. The University of South Africa Department of Health Studies, Research Ethics Committee have approved this study. Should you wish to report any problems you have experienced in relation to the study Prof J Maritz, the Head of the Department of Health Studies' Ethics Committees on Tel number: +27-827888703 or E-mail: maritje@unisa.ac.za.

DECLARATION: CONFLICT OF INTEREST

The researcher will fund the study and have no conflict of interest.

A FINAL WORD

Your co-operation and participation in the study will be greatly appreciated. Please sign the underneath informed consent if you agree to participate in the study. In such a case, you will receive a copy of the signed informed consent from the researcher.

I hereby confirm that the researcher informed me about the nature, conduct, benefits and risks of the study. I have also received, read and understood the above written information.

I am aware that the results of the study will be anonymously processed into a research report.

I may at any stage of the study without prejudice, withdraw my consent and participation in the study. I declare myself prepared to participate in the study.

Participant's name (Please Print) _____

Signature_____ Date:_____

Researcher's name:

Signature_____ Date: _____

ADDENDUM H

Interview guide

ADDENDUM H: INTERVIEW GUIDE

Interview guide for an exploration of cultural beliefs and practices of herbal medicine usage during pregnancy in Lesotho.

Biographical data:

Age: _____ Gravida: _____ Parity: _____

Gestational age: _____

Questions:

“Please tell me more about reasons for using herbal medicine when one is pregnant.”

Possible probing questions

- Who advised you to use herbal medicines?
- Where did you find these medicines (traditional healer, herbalist, mother-in law)?
- What type of herbal medicine is usually used during pregnancy?
- Do you personally use herbal medicines?
- Is there anyone that would advise you about the use of this medicine if you experience side effects?
- How do you know how much of these medicines should you use?
- Do you think that the herbal medicine has an effect on the unborn baby?

ADDENDUM I

Co-coder certificate

Qualitative Data Analysis

Masters in Public Health

THAKANYANE JULIAH LEKHOTSA

THIS IS TO CERTIFY THAT

Dr. Annie Temane has co-coded the following qualitative data:

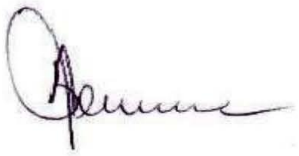
10 Individual Qualitative Interviews

For the study:

"EXPLORING CULTURAL BELIEFS AND PRACTICES FOR THE USE OF HERBAL MEDICINE AND REMEDIES DURING PREGNANCY IN LESOTHO"

I declare that the candidate and I have reached consensus on the major themes, categories and codes reflected by the data during a consensus discussion. I further declare that adequate data saturation was achieved as evidenced by repeating themes.

Annie Temane



M.A.Temane (D.Cur; Research Methodology)

annie.temane@gmail.com

ADDENDUM J

Editor certificate

P.O. Box 100715
Scottsville
3209
5 January, 2020

To whom it may concern,

I have edited the following thesis for language errors, and in the process have checked the referencing and layout:

Title: *Exploring cultural beliefs and practices for the use of herbal medicine and remedies during pregnancy in Lesotho*

Author: Thakanyane Juliah Lekhotsa

Degree: Master of Arts (Public Health)

Institution: University of South Africa

Supervisor: Dr H C de Swardt

Please feel free to contact me should you have any queries.

Kind regards,

Debbie Turrell
totalnightowl@gmail.com
063 891 3870

ADDENDUM K

Plagiarism certificate

turnitin

Digital Receipt

This receipt acknowledges that Turnitin received your paper. Below you will find the receipt information regarding your submission.

The first page of your submissions is displayed below.

Submission author:	Thakanyane Juliah Lekhotsa
Assignment title:	Complete dissertation/thesis submis…
Submission title:	dissertation
File name:	dissertation.docx
File size:	75.38K
Page count:	71
Word count:	18,159
Character count:	99,059
Submission date:	16-Dec-2019 03:14PM (UTC+0200)
Submission ID:	1235377961

Exploring cultural beliefs and practices for the use of herbal medicine and remedies during pregnancy in Lesotho

STUDENT NUMBER: 51134713
NAME: Thakanyane Juliah lekhotsa
DEGREE: MASTER OF ARTS
DEPARTMENT: HEALTH STUDIES, UNIVERSITY OF SOUTH AFRICA
SUPERVISOR: Dr. H C de Swardt

ABSTRACT

The study's purpose was to provide culturally sensitive health information about the use of herbal medicine by pregnant mothers in Lesotho. A qualitative explorative and descriptive study was employed to explore the cultural beliefs and describe the practices of pregnant women in a rural clinic. Fifteen pregnant women, attending a rural antenatal clinic were purposefully and conveniently selected. Data were collected through semi-structured interviews using Colaizzi's seven-step method to analyse the data. Ethical principles and strategies of trustworthiness were applied. One central theme, 'Women believe that the use of herbal medicine and remedies are traditional practices that pregnant women need to follow due to culture' emerged. Cultural beliefs and practices of the pregnant women are deeply rooted within Basotho culture which guided the use of herbal medicine however, some believed it is harmful. The dosages and content of these herbal medicine vary. Nurses are key figures when providing health education that is culturally sensitive.

Keywords: Herbal medicine, cultural beliefs and practices, pregnant women, health education

ADDENDUM L

Interview transcript

ADDENDUM L: Interview transcript

PARTICIPANT 3

AGE: 22 years **GRAVIDA: 2** **PARITY: 1**

GESTATIONAL AGE: 37 weeks

KEY: P: Participant

R: Researcher

R: Hello Mum, My name is Thakanyane Lekhotsa, I am a Masters student at UNISA, doing a study which attempts to understand the underlying beliefs and practices of herbal medicine usage in pregnant women attending a rural clinic in Lesotho. The aim is to provide cultural sensitive health information about herbal medicine usage to pregnant mothers Feel free as everything recorded here will be strictly confidential and your identity will remain anonymous throughout the whole interview. Please respond to the questions truthfully and accurately.

R: Please tell me more about reasons for using herbal medicine when one is pregnant.

P: After being married, my mother in law told me the cultural practices that are being done in her family, which included the use of herbal medicines once I notice I am pregnant because pregnant women are prone to bewitchment. When I got pregnant I told her that I am no longer seeing my days, then she prepared the herbal medicines that I was to start drinking, and she told me to drink them every time when I remember with a mug to protect this pregnancy. I started to drink '*Tsitsisa*' which she said it will help the pregnancy to settle for 3 months. From the fifth month she gave me 'phetola' which she said is going to rotate the babe, I took it until end of the sixth month. Then at 7 month according to our culture I was sent at my home to my biological parents to be there until the baby arrives. She gave me another medications to use, the first one was 'plate' which she said it will prevent placenta to come before the baby during labour because if it comes first it can rupture and the baby will die. She also gave me another one which is 'Lehe', this egg she said it will prevent the membranes to bulge during labour. The last one she said I will start the beginning of 9th month which will stimulate the contractions. It was the mercury.

R: Mhhhh. Please tell me more about how they get these medicines?

P: my mother in law was preparing them herself, she was digging them from them mountains and some she bought from herbalists such as mercury.

R: Do you belief that this herbs are working?

P: Hmmm…mum you are opening my old wound when you ask me this question

R : I am really sorry if I am opening your wounds, why are you saying this?

P: I nearly died when I was delivering my first child. I had contractions that were non-stop, and too much to bear, remember I was only 18 years at that time. I pushed from the first contraction until the baby was born. The baby's head was swollen++++, did not cry for the whole day, was put in machines for 3 days. Myself I was bleeding vigorously blood that was not clotting, the doctor was called and I was given trips of blood, Mum I can tell you this herbal medicines are not working instead brings us complications. I did not use them with this pregnancy. Every time I am here for the clinic I tell other women my story.

R: I understand the situation you were in, so where is that baby?

P: she is still around but had problems with milestones, she is not walking, is using wheelchair.

R: How do you feel about this?

P: initially I was angry at my mother in law and also at myself for listening, but I went to counselling several times, that is why I am even able to talk about it to other women.

R: Ok mum. This is the end of our conversation, remember all what we discussed in here will remain confidential, thank you for your time.

ADDENDUM M

Field notes

ADDENDUM M: Field notes

Participant 3 **Age 22** **Parity 1** **Gravida 2**

NOTES

A quite individual with tight body structure before beginning the interview, possibly unsure of her surroundings. Became relaxed after the brief introduction of the research study. Slow to respond to questions, but able to answer asked questions elaborating very well. She became emotional (crying) in the middle of the interview, possibly being triggered by one question (Do you belief that this herbs are working?). Interview had to stop for a while but became calm after a brief counselling and continued with the interview.